

**REPORT OF THE  
INFORMATION TECHNOLOGY INVESTMENT BOARD**

*RECOMMENDED TECHNOLOGY INVESTMENT PROJECTS  
FOR THE 2004-2006 BUDGET BIENNIUM*

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**

**COMMONWEALTH OF VIRGINIA  
August 29, 2003**

## **Introduction**

The *Code of Virginia*, Section 2.2-2458, requires the Commonwealth Information Technology Investment Board (ITIB) to submit a list of recommended technology investment projects and priorities for funding such projects to the Governor and General Assembly by September 1 of each year. The ITIB held its first meeting on August 5, 2003 and elected George Newstrom, CIO, as the Board Chairman. The Board Chairman, acting on behalf of the ITIB, hereby submits the Recommended Technology Investment Projects Report to the Governor and General Assembly for the 2004-2006 Budget Biennium.

The Agency Information Technology Strategic Planning (ITSP) Process for the 2004-2006 Budget Biennium was used to collect the information necessary to construct the report and as a vehicle for the CIO to approve the planning phase of the recommended technology investments (*Code of Virginia*, Sections 2.2-2008 and 2.2-2018). Staff from the VITA Project Management Division (PMD) assisted the CIO with information collection, analysis, and report compilation.

In July, Secretary Newstrom provided each Cabinet Secretary a status of the ITSP data collection effort and outlined a process for incorporating recommendations from the Secretaries and the Department of Planning and Budget in the final report. Major technology project proposals from agencies served as the basis for determining which investments were evaluated for recommendation. A preliminary project list was provided to the Department of Planning and Budget (DPB) for review and comment prior to individual meetings with each Secretariat. The DPB review alerted the Secretary of Finance to pending project recommendations and provided the VITA PMD staff with information regarding possible budget issues.

In August, the Deputy Secretary of Technology and VITA staff conducted a series of meetings with each Secretariat. At the meetings, preliminary project recommendations and rankings for the Secretariat were reviewed and discussed. Where applicable, the Secretariat reports identified potential collaboration opportunities for technology investments. The results of each Secretariat review were considered in the final report to the Governor and General Assembly approved by the Chairman of the ITIB.

## **Major Technology Investment Projects by Rank**

Appendix A - *Major Technology Investment Projects by Rank* - is a ranking of project proposals received as part of the Strategic Planning Process. The evaluations were performed as a two-step process. First, the PMD analysts reviewed the project proposals and completed an assessment for each proposal to determine if the project should be recommended to the Governor and General Assembly. For all recommended projects with adequate proposal information, ranking criteria were applied to prioritize the projects within each Secretariat. The recommendation criteria are listed in Appendix B and the ranking criteria are listed in Appendix C. Both sets of criteria were developed from proposal evaluation criteria specified in the *Code of Virginia* and established as IT investment management best practices.

Appendix A - *Major Technology Investment Projects by Rank* - divides the projects into three categories.

- **Recommended for Planning** – projects recommended for planning in the 2004-2006 Budget Biennium, ranked within each Secretariat. This provisional recommendation constitutes approval to undertake only the planning phase of each project. Subsequent development approval will be subject to the review and approval of the ITIB.
- **Identified for Preliminary Planning** - projects identified for preliminary planning that will be initiated in the 2004-2006 Budget Biennium. Projects in this category must submit a project proposal to the CIO at the conclusion of preliminary planning. Subsequent development approval will be subject to the review and approval of the ITIB.
- **Active Projects** - technology projects which will continue in the 2004-2006 budget biennium and are currently active on the Commonwealth Information Technology Major Projects Dashboard or previously approved for planning by the CIO. This category of projects does not require a proposal submission or recommendation; however, continuation of active projects is subject to the recommendation of the CIO and the review and approval of the ITIB.

The Project Descriptions Report (Appendix D) contains the project description for each project on the list of Major Technology Investment Projects by Rank. The Project ID field on both reports can be used to associate the project to the description. Projects are listed in Project ID sequence.

Table 1 through Table 4 (below) summarize the information contained in Appendix A. The project costs contained in this document are preliminary estimates provided by the proponent agency, and are subject to varying degrees of uncertainty. It should be noted that projects are funded from multiple sources (e.g., GEN, NGF, FED, ISF, MIX, OTH) and they span multiple biennia. The Project Cost (Estimate at Completion) is defined as the expected total cost of the project when the defined scope of work has been completed. Consequently, the costs shown in the column “Project Cost (Estimate At Completion)” should not be misconstrued as the funding requirements for the 2004 - 2006 biennium.

<b>Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium</b>		
	<b>Number of Projects</b>	<b>Project Cost (Estimate At Completion)</b>
Recommended for Planning	85	\$280,871,559
Identified for Preliminary Planning	27	\$157,535,811
Active Projects	<u>26</u>	<u>\$624,058,844</u>
<b>Commonwealth Totals</b>	<b>138</b>	<b>\$1,062,466,214</b>

**Table 1: Commonwealth Totals**

Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium by Secretariat		
	Number of Projects	Project Cost (Estimate At Completion)
<b>Secretary of Administration</b>		
Recommended for Planning	4	\$17,241,800
Identified for Preliminary Planning	1	\$500,000
Active Projects	0	\$0
<b>Secretary of Commerce &amp; Trade</b>		
Recommended for Planning	3	\$3,419,895
Identified for Preliminary Planning	0	\$0
Active Projects	2	\$6,420,160
<b>Secretary of Education</b>		
Recommended for Planning	41	\$162,139,496
Identified for Preliminary Planning	2	\$2,657,539
Active Projects	8	\$148,965,399
<b>Secretary of Finance</b>		
Recommended for Planning	3	\$1,206,370
Identified for Preliminary Planning	2	\$170,000
Active Projects	1	\$31,000,000
<b>Secretary of Health &amp; Human Resources</b>		
Recommended for Planning	8	\$40,683,789
Identified for Preliminary Planning	2	\$14,500,000
Active Projects	3	\$17,025,000
<b>Secretary of Natural Resources</b>		
Recommended for Planning	2	\$3,700,000
Identified for Preliminary Planning	0	\$0
Active Projects	0	\$0
<b>Secretary of Public Safety</b>		
Recommended for Planning	18	\$43,868,709
Identified for Preliminary Planning	3	\$2,960,000
Active Projects	3	\$377,731,522
<b>Secretary of Technology</b>		
Recommended for Planning	2	\$3,238,000
Identified for Preliminary Planning	9	\$55,843,000
Active Projects	1	\$2,206,966
<b>Secretary of Transportation</b>		
Recommended for Planning	4	\$5,373,500
Identified for Preliminary Planning	8	\$80,905,272
Active Projects	8	\$40,709,797

Table 2: Project Categories by Secretariat

Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium Largest Five By Cost			
P000468	VSP	Statewide Agencies Radio System	\$370,000,000
P000014	DOE	Web-based Standards Of Learning (SOL) Technology Initiative	\$124,000,000
P000009	DMV	Integrated Systems Redesign	\$50,000,000
P000062	TAX	Public Private Partnership Project	\$31,000,000
P000211	VITA	Email Consolidation	\$24,306,000
Total Cost of Five (5) Most Expensive Projects			\$599,306,000
Total Cost of Remaining 133 Projects			\$463,160,214

Table 3: Largest Five By Cost

Commonwealth Major Technology Investment Projects Requiring Funding for 2004 - 2006 Biennium Percentage of Total Investment Cost by Category by Secretariat				
	Recommended for Planning	Identified for Preliminary Planning	Active Projects	Total
Secretary of Administration	2%	0%	0%	2%
Secretary of Commerce & Trade	1%	0%	1%	2%
Secretary of Education	13%	1%	14%	28%
Secretary of Finance	1%	0%	3%	4%
Secretary of Health & Human Resources	3%	2%	2%	7%
Secretary of Natural Resources	1%	0%	0%	1%
Secretary of Public Safety	3%	1%	35%	39%
Secretary of Technology	1%	4%	0%	5%
Secretary of Transportation	<u>1%</u>	<u>7%</u>	<u>4%</u>	<u>12%</u>
Percent by Project Category	26%	15%	59%	100%
Cost by Project Category	\$280,871,559	\$157,535,811	\$624,058,844	\$1,062,466,214

Table 4: Percentage of Total Investment Cost by Category by Secretariat

### **Collaboration Opportunities for Recommended Technology Investment Projects**

Analysts from the Project Management Division reviewed Agency IT Strategic Plans and project proposals for potential collaboration opportunities. General categories for collaboration were identified and projects were associated with the appropriate categories. In all, fourteen collaboration categories were identified. Examples of the collaboration opportunities, where multiple agencies submitted similar projects, include:

- Voice Over IP (Internet Protocol) – replacing existing telephone and data lines with voice over IP technology
- Web-enablement – web-enabling customer facing components of application systems using an enterprise standard for web applications
- Infrastructure – acquiring or upgrading technology infrastructure components employing enterprise architecture standards and collective procurements
- Application system upgrade, acquisition, or development – acquiring, upgrading, or developing application systems for similar functions such as financial management, grants management, human resource management, etc.

The CIO will identify potential collaboration opportunities to Secretaries and agency heads when approving each Agency IT Strategic Plan. Plans containing projects associated with potential collaboration opportunities will be given qualified plan approval. The qualified plan approval will require the agency to evaluate the collaboration opportunity as an alternative during the development of the final project proposal. Agencies will be required to address collaboration opportunities when seeking development approval from the Information Technology Investment Board.

### **Contact Information**

If you have questions or comments about the Recommended Technology Investment Projects Report, please contact Jo Jo Martin at 786-0505, [JoJo.Martin@VITA.virginia.gov](mailto:JoJo.Martin@VITA.virginia.gov) at the VITA Project Management Division.

**Appendix A**  
**Secretary of Administration**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
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**Recommended for Planning**

1	P000143	SBE	Virginia Election and Registration Information System (VERIS)	\$12,000,000	9/1/2003	1/1/2006	FED
2	P000051	DGS	Laboratory Information Management System (DCLS)	\$1,587,000	8/31/2003	12/31/2005	FED
3	P000034	DGS	Seat of Government Voice Over Internet Protocol (VoIP)	\$3,639,800	7/1/2004	6/30/2006	MIX
4	P000413	DEDR	Videoconferencing	\$15,000	7/1/2005	12/1/2005	NGF

**Identified for Preliminary Planning**

	P000473	SBE	Campaign Finance Management System	\$500,000	1/1/2005	6/30/2006	-
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**Active Projects**

None

**Appendix A**  
**Secretary of Commerce & Trade**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
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**Recommended for Planning**

1	P000035	DOF	Private Land Mobile Radio Replacement	\$1,992,704	7/15/2004	6/30/2008	GF
2	P000125	VDACS	Reengineering/Conversion of Legacy Applications	\$800,000	7/1/2004	6/30/2006	MIX
3	P000003	DOF	Integrated Forest Resource Information System (IFRIS)	\$627,191	1/1/2000	12/31/2005	MIX

**Identified for Preliminary Planning**

None

**Active Projects**

-	P000217	VEC	Mid-Atlantic Career Consortium (MACC) Workforce Application	\$5,800,000	1/20/2000	7/1/2004	-
-	P000148	DMME	Automated Utility Tracking System	\$620,160	4/3/2003	4/1/2005	-



**Appendix A**  
**Secretary of Education**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000007	VSU	Re-engineer Core Business Processes	\$5,422,857	1/15/2003	5/15/2008	MIX
2	P000057	UVAH	Clinical System Implementation	\$19,900,000	6/30/99	6/30/2007	OTH
3	P000017	CNU	Centralized IT Services for use by faculty and students	\$2,064,656	7/1/2001	8/15/2005	MIX
4	P000153	LC	Ruffners Technology	\$970,000	7/1/2004	7/1/2005	GF
5	P000150	DOE	Executive Information Management System (EIMS)	\$14,900,000	7/1/2004	6/30/2006	GF
6	P000458	GMU	Telecommunications/Infrastructure Project	\$4,625,000	7/1/2004	6/30/2006	GF
7	P000120	LVA	Find It Virginia	\$5,000,000	8/1/2001	1/1/2099	GF
8	P000162	ODU	Enrollment Growth	\$20,000,000	7/1/2004	6/30/2006	MIX
9	P000149	VCU	Network (VCUnet) Infrastructure Maintenance and Experimental Networking	\$1,677,000	10/1/2003	8/1/2006	OTH
10	P000128	VCA	Replace the current computer network system.	\$50,000	7/1/2004	6/30/2005	GF
11	P000257	NSU	Firewall Implementation	\$83,000	6/29/2003	9/30/2004	GF
12	P000018	RU	Voice Over Internet Protocol (VoIT) Telephone Installation	\$1,414,094	6/1/2003	6/30/2007	MIX
13	P000134	VIMS	Critical IT Infrastructure Project	\$1,150,000	7/1/2004	6/30/2006	GF
14	P000027	JMU	Technology Infrastructure	\$10,775,000	7/1/2004	6/30/2010	GF
15	P000139	JYF	JYF Ticketing Improvements	\$267,345	7/1/2004	6/30/2005	GF
16	P000025	CNU	Workstation and Information-Interface Upgrades	\$1,420,000	7/1/2002	6/30/2006	MIX
17	P000050	CNU	Mitigation of Risk-related Down-Time of Campus Computing	\$1,500,000	7/1/2001	6/30/2006	GF
18	P000010	CNU	Classroom Technology and Faculty Understanding of its Use	\$1,863,700	7/1/2000	6/30/2006	GF
19	P000061	VSU	Student IT Services	\$1,347,500	11/15/2003	6/30/2005	MIX
20	P000005	VSU	Distance Education Initiative	\$1,515,000	10/1/2003	7/15/2006	MIX
21	P000013	VSU	Network Infrastructure Upgrade	\$3,154,844	9/15/2003	12/15/2007	NGF
22	P000060	LC	SCT Corp. - Banner Administrative System Implementation	\$3,800,000	7/1/2004	6/30/2006	GF

**Appendix A**  
**Secretary of Education**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
23	P000147	VCU	Modernization of Communications Infrastructure	\$11,450,200	1/1/2004	12/30/2006	MIX
24	P000121	LVA	Circuit Court Records Preservation Grants	\$1,900,000	10/15/2001	1/1/2013	NGF
25	P000008	VSU	Classroom Instruction Enhancement	\$1,540,000	10/15/2003	3/15/2005	MIX
26	P000036	RU	Storage Area Networks (SANs) environment	\$262,300	1/1/2004	6/30/2005	MIX
27	P000156	VCU	Administrative Systems Replacement	\$11,400,000	4/1/2004	10/1/2008	OTH
28	P000111	GMU	Mason Enterprise Security Architecture (MESA)	\$1,599,000	7/1/2003	12/31/2005	MIX
29	P000086	NSU	Voice over Internet Protocol (VoIP) Telephony	\$1,250,000	1/1/2004	1/1/2006	MIX
30	P000151	ODU	Digital Library	\$3,641,000	7/1/2004	6/30/2007	GF
31	P000438	LC	Replace end-of-life network equipment	\$860,000	7/1/2004	6/30/2006	GF
32	P000231	LC	Replace Private Branch eXchange (PBX)	\$710,000	7/1/2004	12/15/2004	MIX
33	P000465	NSU	RISE Network Connectivity	\$1,800,000	1/1/2004	12/31/2004	GF
34	P000161	ODU	Research Computational Infrastructure	\$8,735,000	7/1/2004	6/30/2006	MIX
35	P000073	JMU	Technology Classrooms	\$4,762,000	7/1/2004	6/30/2010	GF
36	P000464	NSU	Community Hospital Building Renovation	\$1,000,000	1/1/2004	12/31/2004	GF
37	P000466	NSU	Residence Hall Connectivity	\$3,620,000	11/1/2003	8/8/2004	-
38	P000022	LC	Centralized Storage Server	\$435,000	7/1/2004	12/20/2004	GF
39	P000138	NSU	Establish Open Access / Instructional Computer Labs	\$1,125,000	1/1/2004	1/1/2007	GF
40	P000421	NSU	Mediated Classrooms	\$2,150,000	10/1/2003	8/31/2007	MIX
41	P000224	NSU	Data Center Relocation	\$1,000,000	10/1/2003	7/31/2004	GF

**Identified for Preliminary Planning**

P000012	VCCS	J. Sargeant Reynolds Community College Phase IV Building	\$2,000,000	7/1/2004	6/30/2005	-
P000154	LC	Science Building	\$657,539	1/15/2005	12/15/2005	-

**Appendix A**  
**Secretary of Education**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Active Projects</b>							
	P000024	CNU	Web-Accessible, Integrated Administrative Software System	\$2,190,000	2/1/2002	12/31/2005	-
	P000014	DOE	Web-based Standards Of Learning (SOL) Technology Initiative	\$124,000,000	7/1/2004	6/30/2006	-
	P000063	DOE	Teacher Education and Licensure (TEAL)	\$800,000	7/1/2004	6/30/2005	-
	P000030	GMU	Patriot Project (Student Information System)	\$5,325,899	7/1/2001	12/31/2004	-
	P000011	MWC	Administrative System Implementation (EagleLink II)	\$4,625,000	5/1/2003	12/31/2006	-
	P000107	RBC	Complete implementation of new Enterprise Resource Management (ERM) system	\$1,674,500	7/1/2002	6/30/2006	-
	P000019	CWM	Mastering Administrative Systems and Technologies	\$6,450,000	1/1/2002	1/1/2005	-
	P000028	UVA	Oracle 11i Database Upgrade	\$3,900,000	7/1/2003	7/1/2004	-

**Appendix A**  
**Secretary of Finance**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000158	DOA	Geac Software Upgrade	\$391,370	1/1/2002	1/1/2005	GF
2	P000131	DOA	Hardware Upgrade and Software	\$300,000	8/1/2003	6/30/2005	GF
3	P000032	TD	Infrastructure Update & Disaster Recovery	\$515,000	1/1/2004	6/30/2006	MIX
<b>Identified for Preliminary Planning</b>							
-	P000020	DOA	Commonwealth Integrated Payroll/Personnel System (CIPPS) FINDS Web	\$85,000	7/1/2003	1/1/2005	GF
-	P000059	DOA	Lease Accounting System (LAS) Replacement	\$85,000	7/1/2004	6/30/2005	GF
<b>Active Projects</b>							
-	P000062	TAX	Public Private Partnership Project	\$31,000,000	7/1/1998	7/31/2005	-

**Appendix A**  
**Secretary of Health & Human Resources**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000106	DSS	Child Care System	\$9,500,000	6/1/2002	12/31/2004	MIX
2	P000183	VDH	WebVISION – Private Provider Immunization	\$3,060,000	1/1/2004	12/31/2004	FED
3	P000146	DMHMR	Health Insurance Portability And Accountability Act (HIPPA) Security Rule	\$1,200,000	7/1/2003	4/21/2005	GF
4	P000119	DMHMR	Hewlett-Packard e3000 Computer Replacement	\$64,000	7/1/2004	11/1/2004	GF
5	P000145	DMHMR	Clinical Apps/EMR	\$11,843,000	7/1/2004	16/30/2007	GF
6	P000144	VDH	WebVISION Lab Module	\$5,445,952	7/15/2004	12/31/2008	-
7	P000118	VDH	Financial & Administrative System Rewrite	\$2,440,837	8/1/2003	4/30/2006	-
8	P000124	DMHMR	IT Infrastructure Upgrade	\$7,130,000	7/1/2004	6/30/2006	GF
<b>Identified for Preliminary Planning</b>							
-	P000110	DSS	Veronna Service Satisfaction Scale (VSSS) IT Integrated System	\$7,000,000	1/2/2004	12/31/2007	MIX
-	P000117	VDH	Women, Infant, and Children's Nutrition Program II (WIC-II)	\$7,500,000	9/1/2004	7/1/2008	-
<b>Active Projects</b>							
-	P000053	DRS/ VDBVI	Integrated Case Management (ICM) Project	\$3,200,000	12/1/2000	6/30/2006	-
-	P000103	DSS	Automated Program to Enforce Child Support (APECS)	\$4,100,000	11/1/2002	6/30/2005	-
-	P000471	DMAS	Medicaid Management Information System (MMIS) (Maintenance and Enhancements)	\$9,725,000	7/1/2004	6/30/2006	FED

**Appendix A**  
**Secretary of Natural Resources**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
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**Recommended for Planning**

1	P000015	DGIF	Point of Sale License System	\$1,500,000	7/1/2004	6/30/2005	NGF
2	P000091	VMNH	Adventure Classroom	\$2,200,000	1/1/2004	6/30/2005	GF

**Identified for Preliminary Planning**

None

**Active Projects**

None

**Appendix A**  
**Secretary of Public Safety**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000052	DOC	Offender Management System	\$17,000,000	7/1/2004	6/30/2006	GF
2	P000056	VSP	Enhancement of the Automated Fingerprint Identification System21 (AFIS21)	\$700,000	6/1/2004	6/30/2006	-
3	P000461	VSP	Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Palm Print Search	\$2,000,000	9/1/2005	11/1/2006	GF
4	P000002	DCJS	Virginia Integrated Justice Program	\$3,000,000	10/1/2004	10/1/2006	GF
5	P000055	VSP	Enhancement of the Live Scan System	\$400,000	7/1/2004	6/30/2006	MIX
6	P000459	VDEM	IT Infrastructure for the Joint Virginia Department of Emergency Management	\$3,529,109	12/1/2004	3/1/2005	MIX
7	P000141	VSP	Upgrade of Virginia Criminal Information Network software	\$100,000	7/1/2005	12/31/2005	GF
8	P000045	VSP	Disaster Planning	\$2,200,000	7/1/2004	6/30/2006	GF
9	P000033	VSP	Conversion of Master Fingerprint File to Electronic Archive	\$1,600,000	7/1/2004	6/30/2006	GF
10	P000101	VSP	Dissemination of Department of Motor Vehicles photos	\$980,000	7/1/2004	6/30/2005	-
11	P000462	VSP	Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Wireless Access	\$2,000,000	8/1/2004	6/30/2006	GF
12	P000142	VSP	Sex Offender Registry/Livescan Interface for Mugshots	\$109,600	2/1/2005	10/31/2005	-
13	P000058	VSP	Sun Microsystems SUN Fire 6800 Midrange Server upgrade project	\$2,250,000	1/1/2006	6/30/2006	GF
14	P000044	VSP	Re-Write the Automated Workflow for Fingerprint Submissions	\$420,000	7/1/2005	6/30/2006	-
15	P000042	VSP	Statewide Mug-shot and Other Images Repository	\$725,000	12/1/2004	6/1/2005	-
16	P000046	VSP	Conversion of Database Systems on New Platform	\$4,000,000	7/1/2005	6/30/2006	-
17	P000037	VSP	Consolidated Billing System	\$855,000	3/25/2002	3/31/2005	NGF
18	P000463	VSP	Criminal Justice Information System (CJIS) Master Name Index	\$2,000,000	1/1/2005	6/1/2007	-

**Appendix A**  
**Secretary of Public Safety**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Identified for Preliminary Planning</b>							
-	P000423	DCJS	Replace Phone Systems at Division of Forensic Science	\$1,000,000	7/1/2004	6/30/2006	GF
-	P000435	DCJS	Replacement of Building Access System for Division of Forensic Science	\$1,000,000	7/1/2004	6/30/2006	GF
-	P000104	DCJS	Grants Tracking	\$960,000	8/1/2003	7/1/2005	GF
<b>Active Projects</b>							
-	P000468	VSP	Statewide Agencies Radio System **	\$370,000,000	7/1/1999	12/15/2011	-
-	P000469	VSP	Mobile Computer Terminal Upgrade Project	\$3,731,522	4/30/2002	12/31/2004	-
-	P000470	VSP	State and Local Preparedness IT Disaster Recovery	\$4,000,000	1/1/2003	6/30/2005	-

\*\* Total appropriations to date - \$8 million (\$5 million during the 2000-2002 biennium and \$3 million during the 2002-2004 biennium) for the planning, engineering, RFP, and assessment & testing. The project contract is currently being negotiated and will be presented for funding at the 2004 Session.



**Appendix A**  
**Secretary of Technology**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000201	VITA	VITA Information Center (VIC)	\$2,688,000	4/30/2003	12/31/2004	ISF
2	P000467	VITA	Procure Emergency Generator	\$550,000	7/1/2004	6/30/2005	ISF
<b>Identified for Preliminary Planning</b>							
	P000203	VITA	Consolidated Backup Center **	\$10,000,000	7/31/2004	6/30/2006	ISF
	P000202	VITA	Consolidated Richmond Data Center **	\$12,000,000	7/31/2004	6/30/2006	ISF
	P000211	VITA	Email Consolidation **	\$24,306,000	10/31/2003	10/31/2006	ISF
	P000328	VITA	Lightweight Directory Access Protocol (LDAP) **	\$1,400,000	10/31/2003	10/31/2004	ISF
	P000212	VITA	Oracle Financials **	\$1,500,000	10/31/2003	10/31/2004	ISF
	P000213	VITA	Server Consolidation **	\$1,000,000	10/31/2003	10/31/2004	ISF
	P000205	VITA	VITA Customer Relationship Management System	\$597,000	4/30/2003	6/30/2006	ISF
	P000207	VITA	Web Accessibility Standards & Content Management	\$3,100,000	7/31/2003	6/30/2006	ISF
	P000474	VITA	VIPNet Enterprise Solutions	\$1,940,000	7/1/2004	6/30/2006	ISF
<b>Active Projects</b>							
	P000206	VITA	IT Portfolio	\$2,206,966	5/31/2003	6/30/2006	ISF

\*\* These projects are a prerequisite for VITA's cost-saving objectives.

**Appendix A**  
**Secretary of Transportation**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Recommended for Planning</b>							
1	P000095	VDOT	Highway Traffic Records Information System (HTRIS) Technology Upgrade	\$3,000,000	7/1/2003	12/1/2004	NGF
2	P000102	VDOT	American Association of State Highway & Transportation Officials (AASHTO) Bridgeware Implementation	\$1,023,500	10/1/2003	6/3/2005	NGF
3	P000089	VDOT	Statewide Video Distribution Service	\$1,170,000	9/1/2003	12/31/2004	MIX
4	P000029	MVDB	Seat Management Contract Renewal	\$180,000	7/1/2004	7/1/2007	NGF
<b>Identified for Preliminary Planning</b>							
-	P000068	DMV	Redesigned Self Service Kiosks	\$675,234	10/1/2005	11/30/2006	-
-	P000009	DMV	Integrated Systems Redesign	\$50,000,000	7/1/2004	6/30/2006	NGF
-	P000094	VDOT	Violation Enforcement System	\$5,000,000	6/1/2004	6/1/2006	NGF
-	P000114	VDOT	Integrated Six Year Programming System	\$1,290,038	6/1/2003	7/1/2004	NGF
-	P000093	VDOT	Statewide Business Security System	\$1,400,000	7/1/2003	6/1/2006	NGF
-	P000090	VDOT	Statewide Traveler Information System	\$8,640,000	4/1/2003	10/1/2005	MIX
-	P000084	VDOT	"EZ Pass" Reciprocity	\$10,000,000	12/1/2004	7/1/2005	-
-	P000116	VDOT	Program/Project Management System Upgrade	\$3,900,000	8/2003	3/2006	NGF

**Appendix A**  
**Secretary of Transportation**  
*Major Information Technology Projects by Rank*

Rank	Project ID	Agency Code	Project Title	Project Cost (Estimate At Completion)	Planned Start Date	Planned Completion Date	Fund Source
<b>Active Projects</b>							
	P000123	VDOT	Asset Management System	\$2,046,794	3/1/2003	11/30/2004	NGF
	P000006	VDOT	"GEOPAK" Software for Civil Engineers	\$5,000,000	6/1/2000	4/30/2005	-
	P000085	VDOT	Financial Management System (FMS II) Upgrade **	\$18,613,003	7/1/2003	12/31/2005	NGF
	P000001	VDOT	Hampton Roads Smart Traffic	\$3,500,000	11/1/2002	11/1/2005	-
	P000129	VDOT	Pinners Point	\$3,250,000	11/3/2002	11/5/2005	-
	P000115	VDOT	Client-server "Trns*Port" System	\$3,100,000	1/1/2003	7/1/2004	-
	P000122	VDOT	Computerized Environmental Data Reporting System (CEDAR)	\$2,500,000	1/1/2003	8/30/2004	-
	P000472	VDOT	Coleman Bridge Automated Toll Facility	\$2,700,000	2/1/2003	12/30/2004	-

\*\* Only a \$1.5 million planning phase is approved for FMS II.

## Appendix B

### *Selection Criteria for Recommending Major Technology Projects*

<b>Evaluation Criteria</b>	<b>Comment</b>
<b>Strategic Alignment</b>	
Commonwealth Technology Strategic Plan	Supports technology strategic initiatives
Enterprise Business Strategies (EA)	Supports Enterprise Business Strategies
Agency Strategic Direction	Supports core business activities and agency critical issues
<b>Benefits to the Commonwealth</b>	
Constituencies benefitted	
Likelihood that benefits can be realized	
Positive Return on Investment if given	
Mandated	
<b>Past Performance by Agency</b>	
Overall average of all projects listed on the Dashboard for the agency.	Based on lowest overall rating average for any three consecutive months in the last year.
This project listed on Dashboard.	Based on overall project rating for the last three months reported.
Information Technology Investment Management practices reported	
<b>Funding Requirements</b>	
Reasonableness of cost estimates	
Source of funding identified	
Totally non-state funded	
Partially non-state funded	
<b>Risk</b>	
Cost of the project	Higher the total estimated cost, the higher the associated risk
Viability of project based upon description	
Agency risk management approach	

## Appendix C

### *Ranking Criteria for Recommended Technology Projects*

#### Benefits to the Commonwealth

<i>From Project Proposal Evaluation</i>
<b>Constituencies Benefited.</b> To what degree does the project anticipate improvements to internal and external customer service delivery?
<b>Positive Return on Investment.</b> To what degree will the project benefits exceed the project cost (ROI)?
<b>Enterprise Business Strategies.</b> To what degree does the project support the Enterprise Business Strategies of the Commonwealth?

#### Risk Associated With Project

<i>From Project Proposal</i>
<b>Percentage of Preliminary Risk Score.</b>
<i>From Project Proposal Evaluation</i>
<b>Agency Risk Management Approach.</b>

#### Past Performance of Agency

<i>From Project Dashboard</i>
<b>Past Performance on Major Technology Projects.</b> The default rating for this criterion is neutral. However, if the agency has received an overall average of red for any three consecutive months from their Secretarial review, the impact is negative for this category. If the agency has received an overall average of green for any three consecutive months from their Secretarial review, the impact is positive for this category.
<i>From Project Proposal Evaluation</i>
<b>Information Technology Investment Management Practices.</b> This reflects the degree to which the agency employs acceptable IT investment management practices.

#### Technical Feasibility of the Project

<i>From Project Proposal Evaluation</i>
<b>Viability of Project Based Upon Description.</b> To what degree will the proposed project utilize information technologies that will be viable for the expected life of the solution?

# **Appendix D**

## **Project Descriptions**

## Appendix D - Major Information Technology Project Descriptions

Project ID: P000001  
Agency Abbreviation: VDOT  
Project Formal Title: Hampton Roads Smart Traffic

System Integration component of construction project.

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Project ID: P000002  
Agency Abbreviation: DCJS  
Project Formal Title: Virginia Integrated Justice Program

Under the proposed system, a centralized sentence calculation module would be utilized by all correctional agencies. The centralized system would store all data relevant to sentence calculation including sentence orders, jail credits, disciplinary actions, time served, and completion of special programs.

In the Courts Automated Information System, at SCV, court orders would be stored electronically in a standardized format consistent with that currently required under court rules. Electronic signatures would be used to validate sentence order information entered into CAIS and the orders would then be transmitted electronically to the central correctional system.

Agencies with offender management systems would be able to export data in accordance with published specifications so the central system could be updated through an electronic interface. Agencies without an offender management system would enter data such as jail credits, disciplinary actions, completion of assigned programs, and time served would either be entered directly into the central system. This would eliminate the need for the paper forms that are currently used.

Agencies responsible for offenders would electronically receive updates indicating time served information, projected release dates, and dates when the responsibility for offenders is to be transferred to another agency. Courts, corrections agencies, prosecutors, public defenders and authorized private defense attorneys would have the ability to query the sentence calculation system. This system would generate better, more timely and more accurate information for users, which would result in better decisions and reduced legal liability.

This is an integration project involving multiple agencies and DCJS would provide the central coordination needed. Funds would be distributed to the participating agencies in accordance with the project budget. A requirements analysis and general and detailed design would be completed during the first year and development of the central calculation module and standardized forms would be completed during the second year. The deployment to different jurisdictions and agencies would be performed during the following year.

Additional detail is available in Appendix A. Sentence Standardization Project Proposal.

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Project ID: P000003  
Agency Abbreviation: DOF  
Project Formal Title: Integrated Forest Resource Information System (IFRIS)

Current decentralized databases will be replaced with a centralized database containing both tabular and geographic (spatial) data. Application will be web based for both front-end and reporting, including a revolutionary mapping interface. Systems analysis and requirement definition will be completed by internal staff. Database design and front-end development will be contracted out. Current system is comprised of fairly independent subsystems, which easily lend themselves to phased replacement. Microsoft SQL Server has been chosen as the RDBMS because it has proven capacity to integrate both spatial and non-spatial data. ESRI products will provide the interface between SQL Server and the web-based mapping interface. Front-end development will use ASP, VB script and Java script. Crystal Reports will be used for reporting purposes. Primary customers will be DOF employees, but virtually all agency business partners will be secondary customers. The proposed system will track agency data in each functional area. The mapping interface will allow the user to enter spatial records via a map feature and generate maps based on database information. Consolidated statewide information will be available at all agency locations.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000005  
Agency Abbreviation: VSU  
Project Formal Title: Distance Education Initiative

Distance Education Initiative is a new Distance Education service that will include VSU Radio, video and data connectivity to Randolph Farm, video conferencing, cable TV to the dormitories, Learning Technology third party support for course development, and training for the staff who will manage it. This initiative is designed to serve all customers, including students who are enrolled at VSU. It is designed with a minimum of limitations for access and will support customized service delivery according to a customer's profile needs. It is recommended that this project begin in the fall of 2003. It will require approximately three years to implement a full program, which will require continuous change to keep pace with changing technologies. The cost is estimated at \$1,564,000.

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Project ID: P000006  
Agency Abbreviation: VDOT  
Project Formal Title: "GEOPAK" Software for Civil Engineers

GEOPAK is one of the CADD software packages used for plan production and construction by the Preliminary Engineering Divisions. Drawings that are produced using GEOPAK software, create quality plans with reduce errors and omissions and improve quantity cost estimating.

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Project ID: P000007  
Agency Abbreviation: VSU  
Project Formal Title: Re-engineer Core Business Processes

The purpose of this project is to replace current VSU administrative system with technologies that enable a "just in time" information access and delivery for VSU customers, community, and at-large stakeholders. The recommendation is the SCT Banner administrative system that includes Student, Finance, Financial Aid, Human Resources, Web for Student, and Web for Faculty modules. The Human Resources module is being installed now. This solution is a mature software that has been technically proven in the higher education environment. It is widely supported by Collegis, Inc., our resource management partner. The Collegis implementation methodology is a field-tested template for implementing ERP applications in a higher education environment. Collegis provides the technical expertise on-site for the duration of the project and schedules the necessary training and knowledge transfer to VSU staff to enable independent, institution-based operation of the new ERP environment. Total cost of the project is estimated at \$5,000,000. Total implementation time for all modules is estimated to be four years from start to finish.

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Project ID: P000008  
Agency Abbreviation: VSU  
Project Formal Title: Classroom Instruction Enhancement

This project focuses on classroom instruction enhancements that will provide a wireless mobile lab, a computer programming lab, Unix and Linux labs, a Cooperative Extension outreach server, 24/7 student teaching lab, a Virtual Library website, a Model e-classroom, faculty web pages, E-commerce applications, Blackboard curriculum management software, multi-media classroom upgrades, IT for outreach programs, stocks and bonds training software, an Apple Graphics lab, an Ecology server, and program development and assessment software. The project serves a wide range of departments, functions, and customers with an equally broad range of technologies and methodologies designed to bring VSU up to industry standards in the use of technology in teaching. The project is scheduled to begin in October, 2003 with a planned completion date of March, 2005. The cost to complete is \$1,557,215.

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Project ID: P000009  
Agency Abbreviation: DMV  
Project Formal Title: Integrated Systems Redesign

Redesign DMV's information systems, including driver licensing and control, vehicle registration and titling, motor carrier credentialing services and all associated financial and security components to achieve full integration. Phase 1 focuses on driver credentialing: replacing the Digimarc contract for driver's license and ID card issuance, deployment of intelligent workstations for users currently using dumb terminals, adding biometrics criteria for identity integrity, and scanning devices for capturing, storing and retrieving information to make the issuance process seamless, secure and fully integrated. Phase 1



## Appendix D - Major Information Technology Project Descriptions

also includes development and deployment of a new financial system that will allow "point of sale" transactions and netting functionality. Phase 2 of the project will focus on a rewrite and deployment of vehicle credentialing (registration and titling) and development of a "customer file" that will accommodate individuals and business customers. Phase 3 involves integrating motor carrier programs into the new system (IRP, IFTA etc.). Phase 4 will focus on integrating tax compliance programs (Fuels and Rental Tax). The last phase will integrate Transportation Safety into the new redesign.

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Project ID: P000010  
Agency Abbreviation: CNU  
Project Formal Title: Classroom Technology and Faculty Understanding of its Use

Sixty seven smartclassrooms will be designed and implemented by FY 06. One electronics technician and two instructional technologists will be hired to maintain equipment and train faculty and students in the use of the technology. Approximately 4,500 students and 150 faculty will be the customer base served by this project. With the interactive instructional technologies in the majority of classrooms at CNU, a dynamic learning environment will be fostered and faculty and students will be empowered to discover knowledge. Abilities and retention will increase and intellectual stagnation will decline.

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Project ID: P000011  
Agency Abbreviation: MWC  
Project Formal Title: Administrative System Implementation (EagleLink II)

The project is a three-year effort to replace obsolete core technology, business and student systems with a Web-accessible, fully integrated information system developed with maximum flexibility and growth to support the business needs and academic requirements of the College now and as a university.

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Project ID: P000012  
Agency Abbreviation: VCCS  
Project Formal Title: J. Sargeant Reynolds Community College Phase IV Building

Equipment for college's new Technology Building: Classroom and office PCs, data projectors, servers, printers, satellite dishes, etc.

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Project ID: P000013  
Agency Abbreviation: VSU  
Project Formal Title: Network Infrastructure Upgrade

The purpose of this project is two-fold: (1) to keep hardware and software used at the University current with advances in technology; and to insure IT interoperability. The project will: consolidate and upgrade servers; upgrade operating systems and CISCO; migrate from IPX- to-TCO/IP network protocols; and migrate to Microsoft Windows 2000. The importance of staying current is exemplified by the need for higher education institutions to investigate and apply emerging technologies that enable effective development, organization, and delivery of instructional materials. The University must remain current with software and hardware standards if it is to strengthen the research capabilities of faculty, graduate students, and undergraduates, both by pursuing imaginative external relationships and by improving selected campus facilities. It is recommended that this project begin as soon as possible, no later than the fall of 2003, in order to prevent falling further behind in software/hardware currency. The basis for upgrading hardware and software is determined (1) by the need to support multiple levels of security, access, and capability, (2) by the need to add improved features for users, (3) by the need to remain compatible with software and hardware from other schools and agencies, and (4) by the need to keep within the software versions and hardware models that are still supported by the vendor. The order of the network upgrades will be scheduled based on these criteria. The cost of this project is \$3,016,000. Customers are students, faculty, and staff.

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Project ID: P000014  
Agency Abbreviation: DOE  
Project Formal Title: Web-based Standards of Learning (SOL) Technology Initiative

Continued implementation of the Web-based Standards of Learning Technology Initiative to provide tools for instruction, remediation, and online administration of the Standards of Learning Assessments in High Schools. The initiative will be expanded to include middle, then elementary schools (currently a dashboard project).

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000015  
Agency Abbreviation: DGIF  
Project Formal Title: Point of Sale License System

This proposal is based on a system design which includes a combination of configurable purchased software and custom developed components. The back-end system needs to interface with client systems and other back-end processes. The proposed architecture would utilize BIZTalk-Soap-XML standards technology for the inter-process communications. The clients software would be developed using Microsoft .Net Framework software. The use of this technology will allow the development of a single code base supporting multiple channel technologies. Support could be provided to both thin client (i.e. browser based clients connected via broadband connections) and "fat" clients operating on PC or CE based platforms which would operate off-line from the backend systems and upload and download needed information on a daily schedule. Off-line clients would typically not be connected to the host systems while selling licenses. The POS system would serve the license sales needs of approximately 750 license agents throughout the state. The primary benefits include: development of an electronic customer database, increase customer satisfaction through the timely and efficient licensing function, increased back-end productivity, and better cash flow. The client software would be developed utilizing agency staff and contract developers. Initial client hardware would be bid and distributed on an extended rollout schedule. Contract and staff development effort is estimated at \$700,000. Client, server, and communication Hardware and Software is estimated at \$800,000.

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Project ID: P000017  
Agency Abbreviation: CNU  
Project Formal Title: Centralized IT Services for use by faculty and students

By August 2005 CNU will have finished constructing, staffing and equipping an expansion of its academic IT facilities, to be housed in the expansion of the Smith Library. This facility will showcase a Teaching and Learning Center, which will develop our faculty's skills in teaching with technology. This will allow faculty to reach students with diverse learning styles. The area will also house staff supporting WebCT, our online classroom supplement program. A PC lab and help desk will expand our assistance to students who need access to computers. The area will have a separate entrance and will be open 24 hours a day. The Curricular Technologies Center will host a variety of high end workstations and project rooms that will allow students and faculty to create and edit multimedia presentations.

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Project ID: P000018  
Agency Abbreviation: RU  
Project Formal Title: Voice Over Internet Protocol (VoIP) Telephone Installation

Radford University seeks to replace its existing leased Centrex telephone service with a Voice-over-IP solution that can: 1. Meet student, faculty, and staff needs and expectations; 2. Leverage the university's investment in its existing networking infrastructure; 3. Position the university to take advantage of emerging technologies such as toll bypass and Unified Messaging; 4. Result in significant cost savings to the university over the expected life cycle of the equipment.

---

Project ID: P000019  
Agency Abbreviation: CWM  
Project Formal Title: Mastering Administrative Systems and Technologies

This project implements SCT Banner suite of products for higher education in the context of an enterprise resource planning (ERP) system. Implementation includes the student information, finance, and human resources systems with the related web interfaces.

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Project ID: P000020  
Agency Abbreviation: DOA  
Project Formal Title: Commonwealth Integrated Payroll/Personnel System (CIPPS) FINDS Web

CIPPS-FINDS provides a database of point-in-time snapshots of both employee profile data as well as specific payroll reports. The web based application will provide access to a similar level of information for agency usage using a standard WEB browser interface.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000022  
Agency Abbreviation: LC  
Project Formal Title: Centralized Storage Server

This project will fund the purchase of two storage servers for use by the University community. Documents critical to research, teaching, and agency operations will be stored on these servers.

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Project ID: P000024  
Agency Abbreviation: CNU  
Project Formal Title: Web-Accessible, Integrated Administrative Software System

This project will provide information technology to extend the support of administrative and student information needs of a university growing in numbers and quality. This system will add Human Resources and Development functionality to the admissions, registration, housing, finance and financial aid capabilities that are already integrated at the University.

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Project ID: P000025  
Agency Abbreviation: CNU  
Project Formal Title: Workstation and Information-Interface Upgrades

By July of 2004 three major information systems at the University will run from a common relational database--finance, financial aid and student. During the following two years we plan to add human resources and alumni systems to these three. Accessing this system in a self-service mode over the web will become a critical part of our business practices--in fact will dominate our practices. We plan to have the critical business and academic systems available on demand over the web. In order to enable the integrated information system and the extensive web-based, course-augmentation resources developed by faculty and vendors to be easily accessible, we will provide workstations, networking and software that is current.

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Project ID: P000027  
Agency Abbreviation: JMU  
Project Formal Title: Technology Infrastructure

This project will upgrade and expand the university's network infrastructure to better meet the needs of academic programs. The project will install high capacity wiring and network hardware, wireless hardware, additional Internet bandwidth, video hardware and emergency communications capability. This project is part of the university's Six-year Capital Outlay Plan for 2004-2010. A major project task is to increase the bandwidth of the campus backbone by installing single mode fiber throughout campus. The university intends to focus its efforts on expanding bandwidth to the desktop by at least a factor of ten. The network data communication electronics will also be replaced. These new electronics provide enabling technologies that will enhance the university's overall bandwidth, data security and performance management and network availability. Expanded use of technology for the university community will be enabled through (1) virtual local area networks, (2) controlled security access to the port level, (3) greater wireless capability, (4) delivery of data to only the workstations requesting it, and (5) redundant pathways for enhanced availability. As capacity to the wired network is increased, central components will be upgraded to handle the increased traffic and to provide greater fault tolerance. At the same time, expansions to the wireless network will provide additional coverage and flexibility of access. This project will also bring the JMU campus into compliance with the state wiring standard and move more of the cable paths to fiber. Fiber has significantly greater bandwidth capability. This additional capability will serve to extend the life cycle of the financial investment, in effect tripling the present useful life, and assure that JMU will not outgrow the bandwidth capability at the edge devices.

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Project ID: P000028  
Agency Abbreviation: UVA  
Project Formal Title: Oracle 11i Database Upgrade

This project will upgrade the production Oracle ERP finance and human resources applications from the 11.03 versions to the 11i versions. The upgrade will improve the quality of data, enhance support and maintenance, provide new features and functionality, and leverage additional web front-end features.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000029  
Agency Abbreviation: MVDB  
Project Formal Title: Seat Management Contract Renewal

Renewal of existing seat management contract is Critical to MVDB structural IT integrity, technology refresh methodologies, and planned life-cycle. The MVDB currently uses vendor-owned assets, and procures system programming and development on this contract.

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Project ID: P000030  
Agency Abbreviation: GMU  
Project Formal Title: Patriot Project (Student Information System)

The project consists of installing an administrative student system, integrated into the finance and human resources systems. GMU selected SCT Software & Resource Management Corporation to implement its Banner student system.

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Project ID: P000032  
Agency Abbreviation: TD  
Project Formal Title: Infrastructure update & Disaster Recovery

Treasury's approach and solution to solving its aging IT infrastructure problem is to procure new equipment, including workstations, servers and networking equipment. Current IT equipment is nearing or has exceeded its useful life, is out of warranty, and staff is experiencing difficulty running newer applications and equipment failures. Risk of such failure is high as Treasury provides statewide services. Replacement of equipment will result in more efficient operations, enhancement of mission-critical services and better continuing customer service. The procurement plan, if approved and funded, will be initiated in FY 2004 and completed in FY 2005 at an estimated cost of \$515,000. This cost assumes the financing (principal and interest) of the equipment needed over its expected three-year useful life.

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Project ID: P000033  
Agency Abbreviation: VSP  
Project Formal Title: Conversion of Master Fingerprint File to Electronic Archive

The customers for this project are the agencies and staff that submit fingerprint queries and updates.

Below is the project approach:

- identify the physical facility to be used for the conversion effort.
- identify the communications set-up necessary for adequate through-put.
- identify the personnel to execute the conversion process.
- execute the conversion process which includes pulling master fingerprint cards from the bins, feeding the cards through the card scanners, monitoring the scanning process, verifying that the scanning process is successful, and returning the fingerprint cards to the bins.

The cost of this effort is \$1.00 per master fingerprint card and there are 1.5 million fingerprint cards. In addition, \$100,000 is needed for consulting services to oversee the effort resulting in \$1,600,000 for project completion.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000034  
Agency Abbreviation: DGS  
Project Formal Title: Seat of Government Voice Over Internet Protocol (VoIP)

The Department of General Services is upgrading state office facilities around the Capitol with the renovation of the Old State Library in 2003 and the Capitol in 2004. DGS plans to continue through 2006 with renovations of the Finance and Washington buildings, and replacement of the 8th & 9th Street Office Buildings with a new state office building. These facilities renovations provide a unique opportunity for VITA to upgrade the existing Capitol Campus Network (CCN), currently supported by DGS, and to provide consolidated data, video & voice service for the state offices located in downtown Richmond.

## Appendix D - Major Information Technology Project Descriptions

these overlay" networks has proven to be very expensive. The network of the future must offer combined voice and data communications over a single integrated platform built on packet technology. Internet Protocol (IP), the packet technology used on the Internet, has proven its ability to efficiently integrate voice traffic into the flow of data on IP networks, enabling voice and data service delivery from a single multi-service network. Now that IP networks offer the performance characteristics that voice service requires, Voice over IP is ready to provide major benefits to both service providers and enterprises:

- Sustainable cost reduction for service providers and enterprises. Lowers capital and operating costs by converging separate voice and data networks into a single, multi-service network.
  - Increased revenues for VITA by raising the value of voice service, with new applications such as video calling, unified messaging, and Web-enabled multimedia call centers. With multiple services available on a single customer link, providers have lots of opportunities to bundle, cross-sell, and up-sell services.
  - Enhanced productivity for enterprises. New applications such as collaboration and unified messaging enable enterprise employees, wherever they happen to be, to team more effectively and be more productive
- Project Concept:

This project will upgrade campus backbone fiber to support gigabyte Ethernet backbone services, upgrade existing switches to support quality of service priorities for voice services, implement redundant hardware and software to support "pbx-featured" voice service, and install up to 5,000 IP-Voice handsets. The number of individual "IP-Voice handsets" may be reduced as agency staffs realize desktop PCs can provide unified voice, video, and data services.

The current combined fiber and wireless campus network will be upgraded to single mode fiber to support gigabyte speed and distances, the network will be supplemented to form a mesh topology instead of its current ring topology for higher reliability. Existing Nortel switches will be upgraded or replaced as necessary to provide quality of service priority packet management. Redundant-balanced servers with PBX software will be installed to provide fail-over voice coverage. The network will continue to support unified campus access to COVANET via the DS3 circuit. This project is not intended to support WAN-Voice over IP to regional state offices, although the design does not preclude this option. It is expected the project will be phased to coincide with major building renovations and relocations of tenant agencies. This process begins in November 2003 with the move of the Virginia Department of Health from Main Street station to the Madison Building and continues in 2004 with the temporary relocation of legislative and governor offices to the renovated Executive Officer building (old state library), and in 2005 with the relocation of the departments of Planning & Budget and General Services to the Executive Office building and the renovations of the Washington and Finance buildings and the replacing the 8th & 9th Street Office buildings in 2005 - 2006.

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Project ID:	P000035
Agency Abbreviation:	DOF
Project Formal Title:	Private Land Mobile Radio Replacement

Upon notification of (FY04) funds availability, FCC re-licensing would begin on 130 stations and be coordinated through the Forestry Conservation Communications Association. We anticipate re-licensing will take less than one year. Concurrently, first year equipment for Regions 2 and 6 would be procured, programmed, installed, tested and placed in standby. Cutover is scheduled for September 2004 providing one month for on-air confidence testing prior to the fall fire season beginning October 1st. Upon release of FY 05 funding, equipment procurement and installation for Regions 3 and 5 will begin to coincide with the ongoing narrowband upgrade by the Jefferson and Washington National Forests. Regions 3 and 5 work in concert with the National Parks workforce to suppress wildfires in the area. We will follow the same basic procedures for each subsequent cutover however, through project feedback will make minor schedule adjustments. Target cutovers are scheduled for September 2005 for Regions 3 and 5 followed by September 2006 for Regions 1 and 4 (FY06). The final year, FY07 will be focused on replacing the remaining mobile and handheld equipment along with the procurement of remaining four (4) mobile repeaters.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000036  
Agency Abbreviation: RU  
Project Formal Title: Storage Area Networks (SANs) Environment

Radford University seeks to purchase and install a SAN (Storage Area Network) to provide centralized storage and backup capabilities for Radford University's critical e-mail, web, and home directory servers. After initial installation, additional smaller servers will be added to further centralize server storage and backup needs. When and where appropriate, administrative resources will be included in a SAN environment. Customers served are students, faculty, staff, alumni, the community and friends of the university. Reference Section 3 of the included "Cost Benefit Analysis" for cost data.

- Provide consolidated high speed reliable backups
  - Enhance disaster recovery options
  - Ability to easily and quickly recover accidentally erased data from "snapshot" images
  - Ability to create and access "business copies" of server data for testing
  - Easy increase of disk capacities with no down time as user demand dictates instead of having to buy it all upfront when the server is purchased.
  - Reduced management of disk drives on existing and new servers
- 

Project ID: P000037  
Agency Abbreviation: VSP  
Project Formal Title: Consolidated Billing System

The CBS project will follow the standard systems development life cycle (SDLC) and the Commonwealth's Project Management Guidelines. The Project Initiation Phase and requirements analysis task have already been completed, and the project is currently in the Project Planning Phase. Because there is no existing system to handle VSP's complex project billing needs (which account for the largest dollar amount of VSP billing and, subsequently, the largest dollar amount of under-billing), the first software release will be designed to automate the timesheet entry and project billing activities. The remaining CBS requirements, which will automate twenty-four other billing activities, will be included in the second software release. The project is funded through the administrative fee that VSP charges for certain billing activities. The major expense for this project is the development resources. Due to VSP Data Processing staff limitations, VSP is using contractors to supplement the existing staff. However, Data Processing staff will be used instead of contractors whenever possible, and the use of contractors will be phased out in the later stages of the project, allowing VSP staff to take ownership of the system enabling them to effectively maintain the CBS after implementation. Until VSP can link employee payments with the collection of project billing information, VSP will continue to under-bill its customers. Once VSP automates its accounts receivable functions through the CBS, VSP will be able to accurately bill its customers and be reimbursed for its expenses, thereby providing long term financial benefits to the Commonwealth.

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Project ID: P000042  
Agency Abbreviation: VSP  
Project Formal Title: Statewide Mug-shot and Other Images Repository

See Business Problem above for background information. The customers for this project are all VCIN users, which consists primarily of law enforcement officers and prosecutors.

Below is the project approach:

- Define requirements (high level draft available) and prepare RFP to bid out purchase of centralized mugshot system.
  - Issue RFP and select vendor for centralized mugshot system (\$500,000 for software).
  - Purchase hardware for system (\$150,000).
  - Integrate solution with existing VSP systems (i.e. to receive Type-10 record from localities, interface with electronic archive system, provide query and view capabilities through VCIN) (\$75,000).
- Total est. time: 12 mos. Total cost: \$725,000.

Deliverables:

- Centralized mugshot system and interfaces.

The "Project Business Objectives" above correlate to the expected benefits.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000044  
Agency Abbreviation: VSP  
Project Formal Title: Re-Write the Automated Workflow for Fingerprint Submissions

See "Business Problem" above for background information. The customers for this project are agencies and staff that submit fingerprint queries and updates. Below is the project approach:

- Develop system requirements for automated fingerprint workflow system and VSP systems that interface with the workflow system. Est. duration: 4 months. Est. cost: \$50,000. Key requirements include: 1) standard business logic for all processes that can be manipulated for each type of service (e.g. criminal, sex offender, etc.) through tables; 2) standard interfaces with each system; 3) ability to handle anticipated transaction load; 4) improved edits and error identification; 5) ability to meet known future requirements (e.g. single fingerprint searches).
- Prepare system design, programs system and conducts unit testing for workflow system. Est. duration: 8 months. Est. cost: \$200,000.
- Prepare system design, programs system and conducts unit testing for systems that interface with workflow system. Est. duration: 8 months. Est. cost: \$170,000.
- Conduct integration testing. Estimates included above.

Total est. time: 12 months. Total est. cost: \$420,000.

Deliverables:

- New fingerprint workflow computer programs for fingerprint workflow system that would reside on new VSP platform.
- New computer interfaces with VSP's Computerized Criminal History (CCH), Consolidated Applicant Tracking System (CATS), Sex Offender Registry (SOR), NATMS and other applications.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000045  
Agency Abbreviation: VSP  
Project Formal Title: Disaster Planning

AFIS staff at VSP would work with the current AFIS vendor to determine options for the establishment of AFIS tenprint and latent search and storage capability at the disaster site. The workflow for the disaster site tenprint and latent processing would be documented. The equipment, software and installation and maintenance services for the tenprint component would be procured from the vendor. A budgetary cost of \$1,200,000 was estimated using experiences from prior purchases. The same process would be used for the procurement and installation of the AFIS latent fingerprint capability. This capability is expected to cost \$1,000,000. These upgrades would be performed in two phases - thereby spreading out the costs - although project initiation and planning would cover both the tenprint and latent search capabilities. Both the criminal justice and applicant agency communities throughout the state would continue to be served in case of a disaster at VSP Headquarters. Below is the project approach:

VSP researches and develops requirements for disaster site equipment and software. Estimated duration: 3 months.

VSP works with AFIS vendor to finalize requirements, system design, develop project schedule, and obtain contract.

Estimated duration : 4 months

Vendor programs tenprint system and loads software: 5 months Estimated vendor cost \$300,000.

Vendor converts existing AFIS tenprint databases to disaster system. \$250,000

Vendor delivers system and VSP and vendor conduct acceptance testing on tenprint system. Estimated duration: 3 months.  
Cost: \$650,000

Vendor programs latent system and loads software. 5 months. Estimated vendor costs: \$300,000.

Vendor converts existing AFIS latent databases to disaster system. \$200,000

Vendor delivers system and VSP and vendor conduct acceptance testing on latent system. Estimated duration: 2 months.  
Cost: \$500,000.

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Project ID: P000046  
Agency Abbreviation: VSP  
Project Formal Title: Conversion of Database Systems on New Platform

See "Business Problem" above for background information. The customers for this project are all users of VSP systems.

This project is part of a continuing effort to modernize VSP applications that currently reside on older mainframe and UNIX platforms. When this project starts, most of the VSP applications will be moved to the new platform but will generally utilize

## Appendix D - Major Information Technology Project Descriptions

The cost of this effort is \$4 million over two years plus \$100,000 each year for operations and maintenance. A relatively small amount of funding will be requested in FY '07 to modernize a few small systems that are outside of the scope of the larger effort proposed here.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID:	P000050
Agency Abbreviation:	CNU
Project Formal Title:	Mitigation of Risk-related Down-Time of Campus Computing

By the end of 2005 CNU will have reliable, hardened systems fully capable of handling security, weather, fire, chemical, biological and limited nuclear disasters with a reasonable expectation of protecting data and system access.

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Project ID:	P000051
Agency Abbreviation:	DGS
Project Formal Title:	Laboratory Information Management System (DCLS)

DCLS is currently exploring all avenues to procure a comprehensive LIMS and will follow standard system life-cycle approach for its implementation. The implementation of a comprehensive, integrated DCLS LIMS will improve services to numerous state and local customers including: Virginia Department of Health, Agriculture and Consumer Services, Conservation and Recreation, Corrections, Criminal Justice Services, Emergency Services, Fire/Hazmat Programs, Environmental Quality, Game and Inland Fisheries, Labor and Industry and the Virginia Lottery.

The DCLS LIMS will:

- Provide customers with real-time access to sample testing, test results and kit information.
  - Provide customers with better tools and reports to evaluate laboratory data.
  - Provide enhanced connection to National and International Public Health data bases to track organisms and diseases.
  - Reduce report delivery times and expands reporting capability.
  - Reduce sample collection, data entry, and analytical errors.
  - Provide faster results.
  - Provide improved quality of laboratory data.
  - Provide improved data security and comply with regulations for maintaining and communicating data using standardized data formats.
  - Provide additional web functions under the Web-enabled Government initiatives.
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Project ID:	P000052
Agency Abbreviation:	DOC
Project Formal Title:	Offender Management System

The replacement of our existing systems and the integration of offender information throughout the DOC, including community corrections and institutions, will:

- Save time and money
- Replace a hodgepodge of smaller systems that are difficult to support, are not integrated, and which do not meet our needs
- Improve the quality of offender data
- Allow easier integration and interface with other criminal justice agencies
- Allow for the automation of specific business processes that can result in significant savings
- Give line staff the information they need to make good/timely decisions
- Help us all meet the Mission of the DOC.

In acquiring and implementing an OMS we will insure that the following measurable objectives are met:

- Replace OBSCIS, VACCIS, TIPS, EIS, PSI, ASI, and the Parole Board decision-making system with a single integrated solution.
- Make real time data available to all authorized users.
- Use a standard database and eliminate redundant data entry to simplify required maintenance and support, and to reduce associated costs.
- Provide system generated ALERTS to immediately notify selected staff of events occurring within the system.
- Include "workflow automation" to complement business process re-engineering that will provide significant operational



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using DOC staff resources.

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Project ID:	P000053
Agency Abbreviation:	DRS
Project Formal Title:	Integrated Case Management (ICM) Project

Promote common business practices for case management by using a single turnkey business application for 21 programs that provide services to people with disabilities. Sponsored and funded by two state agencies with shared cost.

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Project ID:	P000055
Agency Abbreviation:	VSP
Project Formal Title:	Enhancement of the Live Scan System

The customers for this project are the agencies and staff of the over 100 live scan system sites in Virginia. This includes all large and medium law enforcement agencies and numerous applicant agencies such as school systems.

Below is the project approach:

VSP researches and develops requirements for changes to live scan software (due to legislation or to add features to current operations). Estimated duration: 2 months.

VSP works with vendor to finalize requirements, system design, develop project schedule, and obtain contract. Estimated duration : 2 months

Vendor programs system. 4 months

VSP and vendor conduct unit testing for VSP systems that interface with live scan systems. Estimated duration: 2 months.

Vendor with VSP support install changes on live scan systems. 2 months.

This process is repeated annually.

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Project ID:	P000056
Agency Abbreviation:	VSP
Project Formal Title:	Enhancement of the Automated Fingerprint Identification System21 (AFIS21)

The AFIS21 system stores and searches fingerprints for criminal justice and employment checks. It is the basis by which Virginia's Computerized Criminal History and Sex Offender Registry systems are updated. Currently there are 1.5 million sets of fingerprints stored on AFIS and accessible from 24 remote AFIS terminals in local and state agencies and more than 100 live scan systems installed throughout the state. Periodic upgrades are important to keep the system up-to-date and functioning properly. Additionally, as the databases continue to grow, system improvements need to be made to maintain or improve fingerprint search accuracy.

System requirements are updated periodically by VSP AFIS staff and reviewed with the AFIS vendor. Vendor proposals are received and reviewed. Information is gathered from other states regarding their system operations. Upgrades are then procured for the items that have the greatest benefit to Virginia's AFIS operations. Priority is given to changes that affect fingerprint processing efficiencies or accuracy.

Legislative changes also dictate changes to the AFIS applications such as the recent change that allowed law enforcement access to juvenile fingerprints.

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Vendor with VSP support install changes on AFIS. 1 month.  
This process is repeated annually.

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Project ID: P000057  
Agency Abbreviation: UVAH  
Project Formal Title: Clinical System Implementation

(1) Business Problem: Outpatient clinics are currently handwriting patient orders for lab, radiology, pharmacy, etc and the inpatient ordering is on a 20-year old legacy system resulting in lack of cohesive information infrastructure. In order to compete at the most effective level in efficiency and quality the Medical Center must have a contemporary infrastructure.

(2) Specific solution: Implement IDX Clinical System (chosen through extensive RFP process) in outpatient clinics to replace manual ordering process and implement IDX Clinical System to replace 20 year old legacy system in emergency care and inpatient orders yielding consistent information infrastructure across the continuum of health care. The IDX Clinical System is utilized by Mayo Clinic, INOVA Health System in Northern Virginia and other leading healthcare organizations. Completion of implementation is targeted for FY 06 and major procurements will total \$14 million as documented in Part 1 submission.

(3) Customers served by this project include the UVA Medical Center patients, their families and the direct careproviders in the Medical Center. The Medical Center patients and their families will be served through the benefit of quality improvements. The clinicians and caregivers that are employed by the Medical Center will be served through the improved information flow and process efficiency.

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Project ID: P000058  
Agency Abbreviation: VSP  
Project Formal Title: Sun Microsystems SUN Fire 6800 Midrange Server upgrade project

The SUN Fire 6800 system will be approximately three years old in 2006. It will need to be upgraded with additional resources. All mission critical databases reside on the SUN system and almost all systems development is done on it. The system upgrade will be necessary to maintain the high level of service regarding dissemination of criminal justice information in Virginia. This is a long-term critical issue. The upgrade includes both hardware and software. Based on preliminary information from SUN, the cost of the upgrade of the SUN Fire 6800 system is estimated at \$1,150,000 for FY2006, and \$250,000 annual recurring cost. The TCO for a three year period \$2,250,000. This figure assumes a one-year hardware and software warranty.

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Project ID: P000059  
Agency Abbreviation: DOA  
Project Formal Title: Lease Accounting System (LAS) Replacement

The solution will be a web-based Lease Accounting System with data entry, inquiry and download functionality. The system will be developed by agency personnel using a standardized web platform. The system will make the tracking and reporting of leases more efficient.

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Project ID: P000060  
Agency Abbreviation: LC  
Project Formal Title: SCT Corp. - Banner Administrative System Implementation

Purchase and install a new administrative ERP portal based on input from focus group and evaluation by technical experts and benchmarks from other universities. This will enhance the delivery of services to customers, reduce long-term expenditures and allow us to streamline our resources into leading-edge technology. Major business process improvements would be realized immediately after implementation.

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Project ID: P000061  
Agency Abbreviation: VSU  
Project Formal Title: Student IT Services

This project focuses specifically on IT installations and improvements that are student centered. It encompasses several initiatives that will enhance student services, such as wireless registration, technology improvements in the Library, expansion of the Intranet to include more information for students, space utilization, student PCs, and "anytime" availability of technology. The planned start date is at the beginning of the fall semester and will continue until May, 2004. The major procurements associated with this project are the student PCs at a cost of \$100,000. The remaining project cost is \$1,072,908.

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Project ID: P000062  
Agency Abbreviation: TAX  
Project Formal Title: Public Private Partnership Project

TAX and American Management Systems (AMS) are engaged in a six-year partnership project to perform a comprehensive reengineering initiative that enables TAX to improve operating efficiency and deliver better service to its customers.

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Project ID: P000063  
Agency Abbreviation: DOE  
Project Formal Title: Teacher Education and Licensure (TEAL)

Continued implementation of the Teacher Education and Licensure project, expanding the system to encompass the goals of the Teacher Quality Enhancement grant (currently a dashboard project for a Licensure application that leverages a previous investment by another agency and provides collaboration opportunities for other agencies). This project is funded by a federal grant.

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Project ID: P000068  
Agency Abbreviation: DMV  
Project Formal Title: REDESIGNED SELF SERVICE KIOSKS

The kiosk redesign, built and maintained by DMV staff, will be a reliable network of self-service kiosks, offering most of the online transactions already available on DMV's web site. It will provide customers with a convenient method of conducting their own transactions at a DMV customer service center as well as other locations 24 hours a day 7 days a week. The enhanced extraTeller will be eye-catching, self-marketing and will feature an interactive, easy-to-use touch screen and a keyboard. The estimated const per unit is \$11,765 which does not include communication lines, site preparation, stock, location rental or commissions, signage, promotion, server or bandwidth. We could potentially partner with outside entities to incur the development, maintenance, and kiosk construction cost.

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Project ID: P000073  
Agency Abbreviation: JMU  
Project Formal Title: Technology Classrooms

The project expands the teaching technologies (computer, audiovisual, projection, wireless access, etc.) available to faculty and students in the classroom and encourages their use. It (1) adds 25 new classrooms to our existing technology classroom infrastructure; (2) substantially upgrades the technology in many existing rooms; and (3) adds a combination of security measures to all existing and new west and east campus technology classrooms. Necessary major facilities renovations,

## Appendix D - Major Information Technology Project Descriptions

security upgrades to all tech classrooms current and new, will be flexibly distributed during the project's two phases. Approximate implementaton costs of \$2,075,000 for Phase 1, and \$2,687,000 for Phase 2 are part of the university's Six year Capital Outlay Plan for 2004-2010.

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Project ID:	P000084
Agency Abbreviation:	VDOT
Project Formal Title:	"EZ Pass" Reciprocity

Provides electronic toll collection services for toll customers with out of state accounts with facilities participating in EZ Pass network.

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Project ID:	P000085
Agency Abbreviation:	VDOT
Project Formal Title:	Financial Management System (FMS II) Upgrade

The approach to the project will be a two-step process. Key activities in the first phase, expected to take 12 months, will be to validate the concepts that the current Peoplesoft versions offer, develop a requirements document, select and train a core project team consisting of both business and technology resources, (including the assessment and selection of integration/consulting services), define a clear scope, and develop an accurate cost and schedule for the upgrade. The second step will include procurement and customization of the software and hardware and consulting/implementation services. The estimated period for completing this phase is 12 to 18 months.

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Project ID:	P000086
Agency Abbreviation:	NSU
Project Formal Title:	Voice over Internet Protocol (VoIP) Telephony

The project will consist of a pilot phase followed by full scale implementation. The pilot phase will consist of providing IP phones for 50 users who will provide feedback on the selected system. Only enough money to support the 50 units will be spent. Assuming user feedback is acceptable, we will begin to replace all currently used phones with new IP phones. The full implementation will take about 3 - 6 months. Users will not initially recieve any new features but will enjoy much faster response time to issues or changes. Once the full implementation is complete, new features not currently available will be added.

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Project ID:	P000089
Agency Abbreviation:	VDOT
Project Formal Title:	Statewide Video Distribution Service

This project proposes to use a service contract approach to network together the traffic video cameras around the state and deliver that camera imagery to transit, police, fire, EMS and homeland security agencies to improve safety, mobility and emergency response. The benefits of the project include improved response times to incidents, improved allocation of resources to incidents, improved transit bus operations, and improved public safety through the sharing of traffic video imagery with other public sector agencies. The project was initiated in the Northern Virginia region with 75 VDOT traffic cameras. There are another 200 traffic cameras currently in operation in other regions of the state with another 100 or so slated for deployment over the next three years. Phase II of the project will be to integrate the traffic cameras from the Hampton Roads region, including the cameras from localities such as City of Norfolk, City of Hampton and City of Newport News into a statewide network for distribution with the cameras from Northern Virginia. This will be accomplished by December 2004. Estimated cost is \$500,000. Phase III will be to integrate the cameras in the Richmond region. This will be accomplished by June 2004. Estimated cost is \$100,000. Phase IV will be to integrate the cameras on the I-81 corridor. This will be accomplished by December 2004. Estimated cost is \$300,000. When completed at the end of 2004, we anticipate that all VDOT, and many local traffic cameras will be integrated into a single network.

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Project ID: P000090  
Agency Abbreviation: VDOT  
Project Formal Title: Statewide Traveler Information System

This project is an expansion of an existing travel information service deployed along the I-81 corridor in western Virginia. The current contract is a fee for service contract, with revenues from the listing of specific traveler services returning to the project to defray monthly service fees. To date, more than \$28,000 has been returned to VDOT to defray project costs. VDOT is currently developing a strategic plan to deploy the service on a statewide basis. The service is telephone based and uses the 511 abbreviated dialing digit to access the system. The system uses an advanced interactive voice response system that allows users to use normal speech to request information on traffic conditions, restaurants, hospital locations and points of interest.

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Project ID: P000091  
Agency Abbreviation: VMNH  
Project Formal Title: Adventure Classroom

The Adventure Classroom will be the heart of the distance education program at VMNH. It will be a state-of-the-art videoconferencing science classroom. The VMNH Adventure Classroom will be an exciting vehicle for the Museum to truly become "a museum without walls." Here, learners will explore nature from a multi-disciplinary perspective that will spark imaginations, enhance curricula, and support the Virginia Standards of Learning. From the barrier islands of Virginia's Eastern shore to the coalfields of Appalachia, the VMNH Adventure Classroom will examine Virginia's natural heritage in a global context, engaging participants with leading scientists who work with them to uncover its rich biological and geological history and development.

With the ability to connect to other videoconferencing facilities across the Commonwealth, the VMNH Adventure Classroom will connect scientists with teachers and students to solve complex science problems relevant to all Virginia citizens.

The interactive capability of this technology has produced a distance classroom that is nearly identical to a regular classroom. Teachers and students will be able to interact through both two-way video and one-way video with two-way audio systems. This initiative will also be in line with the No Child Left Behind Act of 2001 in which professional development is supported by:

1. Bringing "mathematics and science teachers in elementary schools and secondary schools together with scientists ... to increase the subject matter knowledge of mathematics and science teachers and improve such teachers' teaching skills through the use of sophisticated laboratory equipment and work space..."
  2. Promoting "...strong teaching skills for ... science teachers and teacher educators, including integrating reliable scientifically based research teaching methods and technology-based teaching methods into the curriculum."
  3. Establishing "...distance learning programs for mathematics and science teachers using curricula that are innovative, content-based, and based on scientifically based research that is current as of the date of the program involved." (No Child Left Behind, 2001. Available at: <http://www.ed.gov/legislation/ESEA02/pg26.html>). The major procurements associated with this project will be made during the time (scheduled for 6/2004) that other equipment is purchased and installed in the new museum building. The estimated costs are as follows: Voice Systems, LAN System \$350,000, WAN- Wide area network connections \$100,000, CAT-6 cable for network \$350,000, and Audiovisual and distance-learning, videoconferencing \$1,400,000.
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Project ID: P000093  
Agency Abbreviation: VDOT  
Project Formal Title: Statewide Business Security System

VDOT Statewide (Transportation) Business Security System preliminary estimated cost of \$1.4 million. Supporting project is statewide implementation of VDOT-specific access control system in place in VDOT Central Office and bridge-tunnel complexes.

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Project ID: P000094  
Agency Abbreviation: VDOT  
Project Formal Title: Violation Enforcement System

To develop a standard toll violation and collection enforcement system for use throughout the Commonwealth of Virginia.

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Project ID: P000095  
Agency Abbreviation: VDOT  
Project Formal Title: Highway Traffic Records Information System (HTRIS) Technology Upgrade

The approach to this project consists of three component: 1) The development of the Road Inventory through GIS centerlines, 2) the extraction of the business data out of Adabase and into Oracle, and 3) web application development. The specific solution will spatially enable the data, make data accessible through relational versus hierarchical database technology, and provide interface potential to like information systems. Customers served will be the Mobility Management Division, Structure and Bridge Division, Transportation and Mobility Planning, and Asset Management. Expected benefits will include unprecedented access by internal information systems to official agency business data, improved and streamlined federal reporting, and the availability of more accurate and timely roadway characteristic information.

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Project ID: P000101  
Agency Abbreviation: VSP  
Project Formal Title: Dissemination of Department of Motor Vehicles photos

See Business Problem above for background information. The customers for this project are all VCIN users, which consists primarily of law enforcement officers and prosecutors.

Below is the project approach:

- Define and add ability for VCIN to query and send users DMV photos, using capabilities previously developed under TIPS related to DMV photo processing. The TIPS project includes an interface between DMV and VSP. Est. duration: 5 mos. Est. cost: \$30,000.
  - Replace current client software for VCIN, which cannot receive images, with client software capable of receiving images. For 2,541 users this would cost \$950,000. The software would be installed by existing VCIN support staff. Est. duration: 7 mos. Est. cost: \$950,000.
- Total est. time: 12 mos. Total cost: \$980,000.

Deliverables:

- Update to VCIN to link to DMV photo system.
- Purchased and installed VCIN client software to replace existing VCIN software.

The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000102  
Agency Abbreviation: VDOT  
Project Formal Title: American Association of State Highway & Transportation Officials (AASHTO) Bridgware Imple

The purpose of this project is to provide computer software support for the design, rating and management of structures, specifically bridges. Although other design packages are now available on the market, BW provides the best overall solution for the Department due to the combined database included as part of the package.

BW is a comprehensive suite of programs developed by AASHTO that includes OPIS, VIRTIS, PONTIS and a combined database. OPIS provides LFRD design/analysis capability that will become the accepted method of structure design in 2007. VIRTIS provides working stress load factor and LFRD rating capability for structures. PONTIS provides input and analysis of inspection data in order to prioritize maintenance and repairs for department structural assets.

BW Implementation will consist of establishing the combined database, determining the VDOT S&B parameters and entering them into the system, testing software and installation process, and training of personnel in LFRD design theory the use of the new software system. Implementation is anticipated to start the fourth quarter of 2003 and be completed no later than the first quarter of 2005. (Note: WBS has not been generated as yet, so these are approximate dates.)

Major purchases are not anticipated at this time. The one exception may be additional server space for housing the BW database.

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Project ID: P000103  
Agency Abbreviation: DSS  
Project Formal Title: Automated Program to Enforce Child Support (APECS)

The Virginia child support program serves more than 1 million Virginia citizens. More than one-quarter of Virginia's children are part of the child support program. The project proposes to convert the current IMS database structure to DB2, a relational and more flexible structure. It will extend the life of the current system by eliminating the size and processing constraints of IMS databases. The conversion to DB2 will increase staff productivity and collections by setting the stage for additional automation and improving access to data for performance management and analysis. The successful completion of this project will also position the child support program for potential future enhancements such web-enabling the system or moving the system to a different platform other than the mainframe. Services to complete this project will be solicited through a Request for Proposal.

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Project ID: P000104  
Agency Abbreviation: DCJS  
Project Formal Title: Grants Tracking

The approach of the project is to develop an internet based system that will allow grantees to submit grant applications including all attachments and documentation electronically to DCJS. The application information would populate a database that would be used by the agency to evaluate and manage the approved grants. The database would be used to evaluate grants proposals for funding. A database format accessible over the internet would make it easier to share information to grantees, staff in the field and funding sources. Once the grants were approved, grantees could submit additional documents including grant conditions, monetary drawdown requests, and quarterly progress reports through the internet. The database format would also allow both DCJS and our grantees access to information that will help the agency better manage and evaluate the grants we make and provide our grantees with information to help them carryout more effective grant programs.

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Project ID: P000106  
Agency Abbreviation: DSS  
Project Formal Title: Child Care System

### Background

The Child Care program has grown significantly over the past decade. Expenditures have increased from approximately \$9 million in State Fiscal Year (SFY) 1989 to over \$130 million in SFY 2002. The child care program is the single largest assistance program that is administered by the Department of Social Services, yet does not have a comprehensive automated system to support it. In SFY 2002, child care assistance was provided to over \$52,000 children. Without automation, there is no easy or efficient way to provide timely program data. Aggregate data collection is limited and inhibits efficient and effective management of the program.

Automation to support this major program has been limited. Limited case and client information has been in the Virginia Client Information System (VACIS), a system developed in the early 1980s. The present Interim Day Care System (IDC) is a MAPPER-based application that only accounts for expenditures and counts of children and families served. Although an "interim" solution when developed, the Department has used this system for over ten years.

Justification  
Automation for the child care program is not currently a part of either of the department's two major systems that support local programs, ADAPT (Application Benefit Delivery Automation Project) or OASIS (On-line Automated Services Information System). ADAPT is the system for TANF, Food Stamps, and, in the future, other eligibility programs. OASIS is currently supporting foster care, adoptions, child protective services and in the future, is planned to support other child welfare and adult service programs. Item 387, L, of the Appropriation Act requests that the Department of Social Services reports on its plans for automation of child care assistance programs.

Without a comprehensive automated child care system, Virginia is able to provide only limited data to government of public entities on the demographics of families served. There is no automated way to track families or to enforce a time limit for services. Waiting lists are not easily managed by local departments, so there is no reliable statewide count of unmet need. Local departments are largely unable to accurately track trends and forecast need in order to manage local allocations for the program. In SFY 2000, some local departments of social service over-expended child care funds, causing a statewide crisis. While fraud in child care programs is estimated at 5 to 10 percent, without an automated system, fraud detection is not easily identified or pursued. Federal mandates are not easily met and in some cases, data is not provided. Section 98.5 of the Federal Child Care and Development Fund regulations requires states to maintain the list of names and addresses of unlicensed or unregulated providers. Virginia does not currently have this capability. In addition, the current method of meeting Federal reporting requirements is a manual process, which is time-consuming, labor intensive and very inefficient.

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It may be possible to design the new Child Care system as the first module of a new Integrated Social Services Delivery System, another strategic DSS project. To achieve this, key technical guidelines required by both projects must be developed in a timely manner and a new connectivity infrastructure must be installed prior to roll-out of a Child Care system. VITA has agreed to partner with DSS on selection of infrastructure products that will meet future DSS and statewide requirements. A strategic design of Child Care may reduce later potential modification, provide a database and infrastructure for migration of other systems, and reduce overall costs to the state.

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Project ID: P000107  
Agency Abbreviation: RBC  
Project Formal Title: Complete implementation of new Enterprise Resource Management (ERM) system

RBC will complete the implementation of the student and finance modules of SCT Banner and enter the next phase of deployment, which is to expand utilization of the multitude of new features available and to continue to adapt business practices to best take advantage of these new capabilities.

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Project ID: P000110  
Agency Abbreviation: DSS  
Project Formal Title: Verona Service Satisfaction Scale (VSSS) IT Integrated System

The Department of Social Services seeks to develop a browser-enabled information system reengineered to reflect the best business processes and data needs for the local and state workers who provide benefits and services to Virginia citizens. The first phase of this project is a 2-year planning effort, including use of local agency staff, formal business process reengineering, requirements gathering, system design, and other project planning. If reengineered to effectively process the information needs of both citizens and workers, the resulting system can provide for one-time entry of data, provide streamlined processes for quicker service delivery, and provide a method to share data in a secure manner with other users, managers and, where appropriate, clients. Citizens could be provided the opportunity to enter and retrieve information from the system where law and regulation permit. For example, citizens could file applications online which will then be passed to the appropriate case worker for follow-up, making the processes easier as well as saving both citizens and workers valuable time. The system will also provide the capability for workers to download data needed for field work, or on to handhelds or other portable devices. An integrated system will lower systems development and maintenance costs, improve the state's ability to provide future services, and allow local agencies to effectively operate. Projects of this nature and magnitude are currently funded and active in several other states.

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Project ID: P000111  
Agency Abbreviation: GMU  
Project Formal Title: Mason Enterprise Security Architecture (MESA)

This solution was developed in conjunction with the ITU Technology Council with recommendations from the Internet2 Middleware consortium, and various experts at other universities. Specifically, we will use LDAP to maintain directory information, Kerberos to maintain authentication information, and AFS (Andrews File System) to maintain data information. In addition, we will utilize Microsoft Windows to manage existing Windows desktop systems. We will implement linkages between Banner, web servers, email, and other applications to minimize the amount of logons University affiliates need to access their computing resources. Our customers served will include all faculty, staff, students, and other affiliates of George Mason University. The first year of the project will be spent getting the technology running in production, and ensuring that it operates as expected. The next two years will be spent deploying this technology across the desktop systems located at George Mason. Expected benefits include: Higher security for all systems (desktops and servers) attached to the George Mason physical network, fewer passwords to remember, easier access from remote systems (home, etc.), simplified/reduced customer management of their desktops on campus, ability for Apple systems to participate fully with this new architecture, and the ability for our researchers to fully and natively participate with other research 'GRID's at other research institutions.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000114  
Agency Abbreviation: VDOT  
Project Formal Title: Integrated Six Year Programming System

The Programming Division and Information Technology Applications Division will be jointly involved in developing the Automated Six Year Program. The system will provide the following in high-level analysis: Identification of all construction projects that should be reflected in the SYP, Identification of every project by location and scope of work and cost by phase, Graphically depict start and end dates, for preliminary engineering, right of way, and construction phases of project development, Will addresses and force compliance with APA, JLARC and other audit findings and recommendations. Key to success is a development methodology that features the following: Incremental delivery- all work is paced for three-month delivery windows, such that a critical piece of the total project is rolled-out each 90 days. Outside-in Design – Begins with prototypes in this phase: Phase 1 iSYP · Small Teams – a team of 2-3 developers, 4 to 6 Programming Division staff working as Business Analysts, will accomplish the technical work. There are no major procurements or purchases planned as all design and coding will be completed in-house with resource expenditures the primary cost.

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Project ID: P000115  
Agency Abbreviation: VDOT  
Project Formal Title: Client-server "Trns\*Port" System

Includes C/S PES, C/S LAS, and other Trns\*Port products VDOT will use when mainframe Trns\*Port PES and LAS are sunset 6/30/2004.

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Project ID: P000116  
Agency Abbreviation: VDOT  
Project Formal Title: Program/Project Management System Upgrade

This project will upgrade/rewrite the existing Program Project Management System to facilitate the delivery of on time and on budget construction and maintenance projects. This project management system will permit resource loading and multiple project scheduling. The preliminary estimates indicate three years execution time frame at an approximate cost of \$3,900,000.

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Project ID: P000117  
Agency Abbreviation: VDH  
Project Formal Title: Women, Infant, and Children's Nutrition Program II (WIC-II)

The Women's, Infants and Children's Program is a nutrition education system that also provides specific food items that have been prescribed to meet an individual's nutrition needs. The system manages the patient encounter, provides tracking and statistical data, and creates checks which are redeemed at a grocery store. All federal funds. Estimated range is \$5M to \$10M.

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Project ID: P000118  
Agency Abbreviation: VDH  
Project Formal Title: Financial & Administrative System Rewrite

Approach: Develop a new web based system to replace the existing client server system. The new system will retain the functionality of the existing system and include the missing pieces as explained in the business problem.  
Specific solution: The application will be developed using JAVA and will be served by an Oracle database. It would be used by clients using a web browser. Designer 6i will be used to create a new Data Model.  
Timing: The overall time from design to implementation will be Approx 2 ½ years.  
Major Procurement and Purchases: Contractual staffing services of \$1.6M over several fiscal years.  
Customers Served: All the program areas and the local health districts within VDH use the F&A system.  
Benefits: This project will eliminate the current risk/liabilities related to the continued reliance on outdated technology/programming used to support all of the agency's financial and administrative functions and business needs. This includes the risk of the system ceasing to function and negatively impacting all accounting operations including prompt payment of vendors, federal time and effort reporting, etc. The project will also improve the agency's financial reporting, purchasing/obligation tracking, grants management and budget execution. Overall, the agency's stewardship of precious state resources would be enhanced and critical business support functionality would be secured.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000119  
Agency Abbreviation: DMHMR  
Project Formal Title: Hewlett-Packard e3000 Computer Replacement

Project Approach: The consulting staff and project team will identify software applications and business processes to be replaced as soon as possible and will explore options for replacements by December 2004.

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Project ID: P000120  
Agency Abbreviation: LVA  
Project Formal Title: Find It Virginia

Find It Virginia ([www.finditva.com](http://www.finditva.com)) provides a single point authenticated entry for all public library card holders to full text information databases. LVA has contracts for subscription fees for content from 3 vendors: Gale, BigChalk and SIRS. Examples of content include full text magazine and newspaper articles, encyclopedias and other reference works, TV and radio transcripts, company information and investment reports, health and wellness information, literary criticism, and homework help, plus photos, charts, maps, diagrams, and illustrations. All of the content resides on the vendors' servers; public library card holders use the Internet to connect to this content. The Library of Virginia contracts with vendors to license a variety of databases (SIRS, BigChalk, Infotrac, etc.) for public libraries, K-12 schools, and the Virginia Community College System. LVA assists libraries in providing remote access and in dealing with user authentication by partnering with VIPNet. In FY 2005 LVA is eligible for grant funds from the Bill & Melinda Gates Foundation to assist public libraries in maintaining connectivity. The grant is a matching grant.

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Project ID: P000121  
Agency Abbreviation: LVA  
Project Formal Title: Circuit Court Records Preservation Grants

The chancery records created in the circuit court clerks offices, dating anywhere from the 1600s up to the early 1900s, which have been subjects of archival processing (flat-filing, cleaning, and rehousing), will be reformatted to two formats of digital images--the master, which will be a JPEG2000 300 DPI 100 Quality, and a user image, which will be down-sampled to a JPEG 96 DPI 85 Quality encapsulated in a PDF wrapper. This reformatting will be done through outsourcing to the private sector, with statistically-sampled quality control measures undertaken by part-time staff hired into the circuit court clerk's office using grant funds, and trained by CCRP personnel. The customers served by the deliverables from this project will be local government officials, real-estate attorneys, surveyors, and land-title agents, as well as scholarly and family-history researchers. The benefits they all will receive will be greatly expanded access to the reformatted data, which now consists of a maximum four reels of microfilm, as well as a digital color copy of the record that is exponentially more readable than microfilm or photocopy. The total project time is estimated at ten years. The cost for scanning, based only on the number of documents that have been processed in 37 and are ready for reformatting, will be approximately \$4,000,000. This number will only go up as more localities are processed, the chancery records processed and housed at the Library are included, and the records already microfilmed are converted to digital.

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Project ID: P000122  
Agency Abbreviation: VDOT  
Project Formal Title: Computerized Environmental Data Reporting System (CEDAR)

Consolidates multiple applications to track and report on transportation environmental regulations, schedules, etc.

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Project ID: P000123  
Agency Abbreviation: VDOT  
Project Formal Title: Asset Management System

For assets where the inventory information is not available, the business approach is to perform a random sampling of assets in order to determine asset density and condition. The asset density will be extrapolated to estimate inventory statewide. The asset conditions from the samples will be applied to the extrapolated inventory to determine the estimated amount of work needed. The system will be comprised of the following modules that will be developed incrementally; Random Condition Assessment, Needs-based Budget Request, Planning & Scheduling, Work Orders, Accomplishment & Monitoring, Inventory, and Analysis Tools. Customers being served by this system are; Asset Managers, Financial Planners, Research groups,

## Appendix D - Major Information Technology Project Descriptions

Strategic Planners, and Executive Staff. Expected benefits are more accurate planning and budgeting, as well as increased efficiency and resource utilization.

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Project ID: P000124  
Agency Abbreviation: DMHMR  
Project Formal Title: IT Infrastructure Upgrade

Each DMHMRSAS facility or Central Office will determine local needs with input from the IT Steering Committee regarding design and standards. Plans should include those for future growth, changes in building configurations or possible re-locations, ability to maintain near current versions of software and hardware, and network accessibility for as many employees as possible. Implementation will be managed by local IT staff but may involve outside vendors or contractors.

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Project ID: P000125  
Agency Abbreviation: VDACS  
Project Formal Title: Reengineering/Conversion of Legacy Applications

The project approach currently being utilized is to assign staff to reengineering of specific applications based on staff availability, agency priorities, and/or legislative mandates. If funding is provided, the agency will contract with 3rd party vendors from the state contract who are able to provide the required reengineering/conversion functions. The primary expected benefits are to have web-enabled applications for users of multiple systems, and to enable the agency to dispose of the obsolete 9221 mainframe computer.

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Project ID: P000128  
Agency Abbreviation: VCA  
Project Formal Title: Replace the current computer network system.

2 Laptop Computers \$2,280, 6 Desk Computers \$6,000, 6 Monitors \$900, 6 keyboards / mice \$750, 1 server \$3,500, 2 HP printers \$4,000, 1 Scanner \$800, 1 TTD \$800, 1 Fax w/ network connection \$2,000, Novell Software \$1,156, 1 Database software \$1,500, Windows Operating System \$1,800, 6 Word Software Suite \$4,500, 6 Adobe Software \$1,314, Web Design software \$500. Approximately 25% of the staff time will be saved, which can be used to expand our services to the constituents. Staff will not have to spend time resending information 3 or 4 times and then finding other ways to disburse required information that the current computer system can not handle. The Commission will also save money approximately \$10,000 in postage and printing costs. Constituents will be able to download forms, tourbooks and guidelines that our current system can not produce. We would only have to mail guidelines, tourbooks and forms to those who do not have internet access.

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Project ID: P000129  
Agency Abbreviation: VDOT  
Project Formal Title: Pinners Point

Smart traffic (ITS) component of the midtown tunnel construction project.

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Project ID: P000130  
Agency Abbreviation: VDBVI  
Project Formal Title: ICM Project

Promote common business practices for case management by using a single turnkey business application for 21 programs that provide services to people with disabilities.

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Project ID: P000131  
Agency Abbreviation: DOA  
Project Formal Title: Hardware Upgrade and Software

Replace all desktop system's with a more reliable hardware platform. The new systems will utilize the current version of the Windows operating system and the latest version of Office that Microsoft is offering. Replace the token ring technology used on our LAN with Ethernet. Replace our servers with new blade server technology making the system more fault tolerant.

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Project ID: P000134  
Agency Abbreviation: VIMS  
Project Formal Title: Critical IT Infrastructure Project

This project addresses a variety of capabilities in the VIMS Network Services Infrastructure. Some items upgrade outdated or insufficient capabilities. Others offer new technologies which can offer new functionality and improved productivity to the VIMS community. It consists of five components:

1. Campus-Wide Fiber Network - A high capacity and reliable campus network will be constructed by installing approximately 5,200 feet of new underground conduit and approximately 10,400 feet of fiber optic cable in the new and existing conduit to interconnect the buildings campus wide. Multi-strand fiber optic cable will be sized to meet current and projected network bandwidth requirements. This will provide an inter-building network with minimal lightning hazard exposure.

2. 24 Hour 7 Day a Week Gigabit Ethernet Backbone With Switched Ethernet to the Desktop - The switched ethernet protocol, implemented with the appropriate hardware, provides guaranteed Quality of Service (QoS). This level of quality is required to deliver real time applications over the network such as modeling, simulations, interactive video, and voice-over Internet Protocol (IP) telephony. This is the same protocol currently used on the Virginia Broadband Network Project (known as Network Virginia), which interconnects universities, community colleges, K-12 schools, and government agencies of the Commonwealth. The project includes connectivity to desktop workstations, scientific instrumentation, distance learning systems, and servers and storage systems throughout the VIMS community.

3. Enterprise Server and Storage Resources - The mail server capability has to grow to meet the demand of a greater number of increasingly complex mail message exchanges. The web server capability has to grow to meet the demand of the greater quantities of more complex web resources. Disk capacity must grow to meet the demand as the number of data acquisition resources and their contents grow. As disk resources grow, the capacity to preserve and manage those resources must increase.

4. New Building Infrastructure for Voice-Over Internet Protocol (IP) - The new Gloucester Point Marine Research Building Complex, the Kauffman Aquaculture Center at Topping and the Eastern Shore Laboratory in Wachapreague, need to be connected to the VIMS telecommunications environment. This will better enable the VIMS community to work at those locations in the same manner they work at the Gloucester Point campus. This technology will promote easier mobility between office, lab, and research stations and ad hoc videoconference collaboration from any and all of those locations.

5. Campus-Wide Wireless Networking - This project would extend the successful Watermen's Hall wireless network pilot project to compliment the wired Ethernet connections on all VIMS campuses. Wireless network communications are also proving to be an alternative to reach areas where wired connections are cost prohibitive or otherwise unfeasible and cellular technology is not capable of the data transmission required.

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Project ID: P000138  
Agency Abbreviation: NSU  
Project Formal Title: Establish Open Access / Instructional Computer Labs

The university currently has too few labs to support the number of students enrolled. Many labs are run by departments which lack sufficient support personnel with the result that the systems in those labs are often old and/or broken. We will consolidate the various labs into fewer but larger and easier to manage and support labs. The labs will have trained personnel to support them. Some labs will support individual students as well as actual classes being taught in the labs. These classes will support both enrolled students and staff training. Also, the labs will alleviate the shortage of well-equipped classrooms by doubling as instructional space.

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Project ID: P000139  
Agency Abbreviation: JYF  
Project Formal Title: JYF Ticketing Improvements

The project consists of several components: (a) Upgrade of the Paciolan system. This upgrade includes hardware (RS/6000), the software, and professional services (Project Management, Software Installation/conversion, Setup and Training, and database work); (b) Addition of on-line and timed-access ticket purchasing; (c) the hiring of a database/web programmer for

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the Paciolan and related systems; and (d) the purchase and installation of 8 BOCA printers compatible with Paciolan and necessary for ticket printing requirements.

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Project ID: P000141  
Agency Abbreviation: VSP  
Project Formal Title: Upgrade of Virginia Criminal Information Network software

The VCIN messaging server supports nearly all major criminal justice processes in Virginia. All users of criminal history, wanted persons and other systems routinely use VCIN messaging. VCIN also provide critical interfaces with the FBI and NLETS. The VCIN software will be upgraded take advantage of new functionality and features. For example, VCIN upgrades will improve VSP's ability to send mugshots and other images to FBI systems. The ability to share mugshot photos is currently a priority for the FBI and most states. The work to be performed is a straight forward software update install by the product vendor, CPI.

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Project ID: P000142  
Agency Abbreviation: VSP  
Project Formal Title: Sex Offender Registry/Livescan Interface for Mugshots

The customers for this project are all the citizens of the Commonwealth and the Criminal Justice Agencies.

This project is a continuation of the effort to utilize Live scan devices across the state for the entry of data on criminal and civil actions. Entry of data at its source reduces errors. Electronic transmission of criminal and civil activities to the state repositories provides timely responses to such requestors. It also increases the accuracy of state records.

VSP will develop the system requirements for the automated updating of the Sex Offender data received from live scan units to the Sex Offender registry. VSP will work with the vendor that provided the SOR web based programs and server to determine the requirements for automated updating of the records available to the public over the Internet. Vendor costs to perform this work are estimated at: \$50,000

Contractor personnel will then design the program changes to the current Sex Offender Registry system at VSP, program, and test the system interfaces to the live scan systems.  
Contractor costs are estimated at: \$59,600.

The estimated duration of the programming and testing efforts is 6 months.  
The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000143  
Agency Abbreviation: SBE  
Project Formal Title: Virginia Election and Registration Information System (VERIS)

VITA and SBE are hiring a project manager to first perform a full technical and economic analysis of the possible solutions available. A specific solution will be selected and a proposal for a project charter will be submitted. SBE will follow the Commonwealth Project Management Guidelines. We envision the project will require development or modification of a software application, secure internet access, and, perhaps, hardware distribution and installation in 133 local registration offices. The project is funded with federal dollars and must be completed, as directed by HAVA, on January 1, 2006. The project will deliver all of the functionality of the current VVRS as well as the additional functionality necessary to meet the requirements of HAVA and to automate internal (now manual) election and registration procedures. Further, VERIS will include links to DMV (e.g., for ID verification) and other agencies (e.g., State Police to verify felons) that are not now possible. SBE expects that maintaining VERIS will be much cheaper than maintaining the current VVRS resulting in long term financial benefits for the Commonwealth.

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Project ID: P000144  
Agency Abbreviation: VDH  
Project Formal Title: WebVISION Lab Module

The LAB module will be accomplished by following the same development approach used very successfully in Web Vision. This module will be a significant addition to Web Vision. The Lab module will be a significant addition to Web Vision and

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feel. The primary customers for this system are District Health Departments and State Labs. Indirect customers are the health department patients. OIM will be establishing a user group which will consist of staff members of various VDH Labs and clinical sites. This is to insure that all business needs of the state Labs are presented to OIM. We will start requirements gathering with this user group, an integration analysis with the existing Web Vision application, and then use an iterative approach to development by constructing an initial prototype and presenting it to the users for refinement. The LAB module will be implemented in all VDH Labs and clinical sites. The Lab module will improve the service to health department patients. In addition, it will speed up the business flow between the health department and State labs due to online lab orders and results.

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Project ID:	P000145
Agency Abbreviation:	DMHMR
Project Formal Title:	Clinical Apps/EMR

**Project Approach:** The agency will form an EMR Stakeholder Committee which would produce a needs analysis/requirements document which would in turn be used by the IT department to create a general design of the overall system solution. The general design document combined with the requirements document would be used to create a RFP for a COTS solution. **Specific Solution:** Ideally, at a minimum, it would include: Treatment Planning & Assessments, Ancillary Service Orders, Physician Orders, Pharmacy, Infection Control, Discharge Planning, Seclusion and Restraints Tracking, Diet/Nutrition, and Critical Incidents Monitoring and HIPAA compliance. The solution should be web-based running on Unix and be able to support 800 concurrent users. It should utilize wireless technologies for bedside processing and remote access. Report processing would utilize Crystal Reports. The software, user licenses, servers, desktops, wireless devices, service contracts, installation fees, training and documentation for all fifteen facilities should not exceed 12 million dollars. The needs analysis/design/RFP process would commence July, 2004 and end March, 2005. Actual purchasing would commence April, 2005 and end June, 2008. Implementation activities would commence April, 2005. **Customers Served:** Facility clinical departments (1500 users); administrative departments (400 users); and the patient/client (4,700). **Expected Benefits:** An electronic medical record will 1) allow data and the information it produces to be more easily accessible by decision makers at both the direct care level and administrative level, 2) reduce security risks, 3) provide business continuity for HPe3000 (HP retirement 2005) stand-alone patient care systems, 4) reduce physical risks to the patient, 5) increase staff productivity/efficiency and effectiveness.

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Project ID:	P000146
Agency Abbreviation:	DMHMR
Project Formal Title:	Health Insurance Portability and Accountability Act (HIPAA) Security Rule

**Project Approach:** A HIPAA Security Committee will be formed and comprised of representatives (Facility Security Officials) from Central Office and the facilities. The Committee will interpret the ruling, assess the environment, identify the gaps, design the solutions to fill the gaps, test and implement the solutions and perform follow-up. An extremely important part of the approach calls for extensive intrusion testing (White Hat Intrusion) be performed by a reputable firm. This process would expose the vulnerabilities at each of the facilities and Central Office and allow the agency to correct the weaknesses before the federally mandated April 2005 deadline. **Specific Solution:** The chosen solution will depend upon what the ruling specifically requires and associated risk levels. The ruling covers data access, encryption; user authentication, physical security, disaster recovery/business continuity, and audit trails. Technologies that will be employed will be the establishment of public key infrastructures, virtual private networks, secure servers, and security and awareness training. **Customers:** customers include all users (internal and external) of individually identifiable health information. **Expected Benefits:** include an enhancement of many of the security mechanisms already in place. One major benefit will be the securing of Internet email which has always been a popular but insecure method of sending confidential information. Once the solutions are implemented HIPAA compliance will have been achieved.

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Project ID:	P000147
Agency Abbreviation:	VCU
Project Formal Title:	Modernization of Communications Infrastructure

This project will modernize the telephony infrastructure and services at VCU. The University will implement a state-of-the-art IP PBX system to provide a higher level of service at lower cost for University and Health System customers. Sections of the data network will be upgraded to enable IP Telephony to the desktop. Implementation will occur over a 1 year period starting in the spring of 2004.

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Project ID:	P000148
Agency Abbreviation:	DMME
Project Formal Title:	Automated Utility Tracking System

Establish energy management program for Commonwealth Agencies using remote monitoring equipment.

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Project ID:	P000149
Agency Abbreviation:	VCU
Project Formal Title:	VCUnet Infrastructure Maintenance and Experimental Networking

This project has two components. First, the University will continue its ongoing program of upgrading its network infrastructure to meet increasing academic and administrative needs. Second, VCU will help develop and implement experimental network technologies for high demand research projects

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Project ID:	P000150
Agency Abbreviation:	DOE
Project Formal Title:	Executive Information Management System (EIMS)

The Department of Education has made significant progress in understanding and implementing various aspects of the new law since the NCLB was signed into law on January 8, 2002. A major portion of this understanding was the impact of the requirements of the law on information systems. The Department also studied the implementation of longitudinal student information systems by other states, and collected other state's system requirements documents. Additionally, the department contracted with Evaluation Software Publishing (ESP), a nationally recognized expert in educational information at the school, division, state, and federal levels. ESP has identified 13 tasks that states need to complete in order to implement longitudinal student information systems. Further research was conducted to determine Virginia's implementation status. (see status chart in project analysis worksheet). The study concluded that the Virginia Department of Education had the capacity to succeed with the EIMS, given adequate resources and support. The department has a track record of successful project completion, both in-house and contracted; and a stable and standards-based technology architecture. In addition to the study by ESP, VDOE has determined that the following must be included in the detailed system requirements of the EIMS. The system must be consistent with the COVA Enterprise Architecture and the Governor's Strategic Plan for Technology. The system must adhere to COVA Policies, Standards and Guidelines for information security. Development of the system must adhere to COVA project management guidelines. The system must comply with state and federal requirements for handicap access, the Family Education and Right to Privacy Act (FERPA), the Virginia Freedom of Information Act (FOIA), and Virginia Guidelines for the Management of Student Records. The Department of Education will develop detailed requirements for the system components identified in the following chart. (see components chart in project analysis worksheet).

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Project ID:	P000151
Agency Abbreviation:	ODU
Project Formal Title:	Digital Library

This effort builds upon proven innovation by ODU/VT/UVA with regard to advanced technology for handling distributed DL collections, and production-quality efforts for handling theses, dissertations, reports, and courseware. It is in accord with the current trend to build institutional repositories, such as through the MIT-led DSpace initiative. However, through this project, Virginia will be the first to move that to the state-wide level. The ODU/VT/UVA effort will be a model for using DL technology to manage the intellectual output of the Commonwealth. The proposed DL would catalog and store the entire intellectual corpora of the universities and make them available for discovery over the Web by its students, staff, faculty, and the general public.

#### Target Content

- Patents, technical reports, papers, E-journals, conference proceedings,
- Administrative reports
- Courses, reference material for courses, student portfolios
- PhD/MS theses, Accreditation material
- Requests for proposals, funded projects, project reports
- Museum collections

#### Target Audience

- Local (main campus and remote sites) students, faculty and staff

## Appendix D - Major Information Technology Project Descriptions

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Project ID:	P000153
Agency Abbreviation:	LC
Project Formal Title:	Ruffners Technology

This project puts instructional technologies in the Ruffners complex. This technology is consistant with the standard for technologies in place at Longwood. These standards are proven and relaible. It will serve student, faculty, staff and community constituencies. The benefits include a more technology literate group of constituencies, and a better educated student.

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Project ID:	P000154
Agency Abbreviation:	LC
Project Formal Title:	Science Building

Equip new Science Building with instructiuonal technologies.

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Project ID:	P000156
Agency Abbreviation:	VCU
Project Formal Title:	Administrative Systems Replacement

The University's strategy is to replace its financial, human resource and student information systems with a vendor developed and supported solution that utilizes modern technology architectures and native internet access to provide self-service access and business process support to faculty, students and staff. The integrated solution will support workflow methodology and enable seamless electronic communication to constituents, via an internet portal and/or electronic mail. The vendor selected will be able and experienced in providing both technical and functional resources, for installation, training, process analysis and operations.

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Project ID:	P000158
Agency Abbreviation:	DOA
Project Formal Title:	Geac Software Upgrade

This project requires that all software modules be replaced with the upgraded version and that all in house written programs and other systems that use data from the payroll system be modified. Any agency, institution or 3rd party user receiving data from the payroll system will be required to make changes to accommodate the increased field lengths.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000161  
Agency Abbreviation: ODU  
Project Formal Title: Research Computational Infrastructure

This project will provide IT and computational infrastructure at ODU and provide administrative support to enhance core facilities and connections to research sites off-campus such as the Virginia Modeling, Analysis, and Simulation Center and others. The infrastructure investments include computational systems and research network systems that support complex computing applications and take advantage of the computing capability of the institutions, federal laboratories and research centers, and commercial partners in the Hampton Roads regions. The infrastructure will be designed to support distributed computing required to support a secure environment using open architecture, such as Grid Computing. The project will be phased, with campus facilities/systems first developed to directly benefit ODU researchers. The benefit will be to the research faculty and the agencies that fund them by enhancing their capabilities to perform IT and computationally-dependent research. This project will also benefit the community by increased competitive status of the institution for federal funds. Priorities for off-campus connectivity will be based on application demand. For example, existing collaborations in particle physics among ODU and Jefferson Labs create opportunities for sharing large data sets. In addition, the U.S. Navy has placed a major IT platform, network warfare command, in Norfolk and Navy and ODU leaders are discussing how systems research can be maximized. This project begins a long term effort to bring ODU and the region into a unique stature within the high tech community through excellence in specific research areas.

A center for distributed computational resources will be established at Old Dominion University with the goal of increasing research productivity and encouraging collaboration among the principles. The center will coordinate the use of the computational environment through the following:

1. Develop the administrative infrastructure required to manage a grid computing network to enable authorization and authentication as well as demonstrate utility and account for activities through standards-based grid technology.
  2. Sponsor and assistance in the development of complex applications using grid computational systems.
  3. Establish a cooperative research network with the institutions, federal laboratories and research centers, and commercial partners in Hampton Roads, providing for connectivity to other research networks.
  4. Extend access to advanced computational capabilities to the largest possible range of Virginia educational institutions.
  5. Assist research institutions in the availability of high-end computer resources to facilitate collaboration and cost effective utilization.
  6. Leverage research proposals via expanded computational capabilities.
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Project ID: P000162  
Agency Abbreviation: ODU  
Project Formal Title: Enrollment Growth

To address the increase enrollment growth in the Commonwealth of Virginia from a four-prong approach.

1. Increase growth at the main campus
  2. Revised summer program as a third semester
  3. Expansion of the TELETECHNET (synchronous distance learning program)
  4. Implementation of a collaborative partnership with the Virginia Community College System in asynchronous (on-line) course delivery.
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Project ID: P000183  
Agency Abbreviation: VDH  
Project Formal Title: WebVISION - Private Provider Immunization

The Private Provider Immunization Registry will be accomplished by following the same development approach used very successfully in Web Vision. The Web Vision Immunization Registry will be modified to meet the needs of the private providers. The technology used are Oracle database, Designer 2000 Case tool and a three tier Web Architecture. The primary customers for this system are Virginia Private Providers. Indirect customers are Virginia patients. OIM will be establishing a user group which will consist of members from the Private Provider Community. We will start requirements gathering with this user group, an impact analysis on the existing Web Vision application, and then use an iterative approach to development. The goal is to implement the Private Provider Immunization Registry in most of the Private Provider offices in Virginia. and results.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000200  
Agency Abbreviation: VITA  
Project Formal Title: VITA Customer Care Center

The VITA will establish a central customer care center to provide the following basic functions:

1. The system must be able to support contact management for customers and vendors.
  2. The system must be able to provide security and administration to control user access to update ability and views to access based on predefined roles and rights.
  3. The system must support VITA's model for asset inventory.
  4. The system must provide VITA's model for customer profiling.
  5. The solution must provide VITA's model MOA
  6. The solution must support VITA's model for monitoring and reporting service levels
  7. The solution must support VITA's model for contract management.
  8. The solution must support VITA's change management model
  9. The solution must support VITA's model for incident handling.
  10. The solution must support VITA's mandated agency intake schedule as perscribed by the general assembly.
  11. The solution should utilize existing trained VITA and agency help desk staff where feasible.
  12. The solution should support 1st call response and/or resolution for agency end users.
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Project ID: P000201  
Agency Abbreviation: VITA  
Project Formal Title: VITA Information Center (VIC)

The project will 1) develop business processes for the system and build the integration points between network management, Customer Care and CRM 2) implement software and hardware to support process, event monitoring and reporting, escations & notifications, cahnge management, service level management 3)roll out and test tools to support to small agencies, build executive dashboard 4)rollout medium and large agencies and configuration of additional tools if necessary.

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Project ID: P000202  
Agency Abbreviation: VITA  
Project Formal Title: Consolidated Richmond Data Center

Consolidated Richmond data center

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Project ID: P000203  
Agency Abbreviation: VITA  
Project Formal Title: Consolidated Backup Center

Consolidated backup center

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Project ID: P000204  
Agency Abbreviation: VITA  
Project Formal Title: VITA Network Security

Network Security is the foundation for VITA to provide reliable and secure environments for all agencies in the COV. Currently networks are not standardized and vary in their vulnerability to threats of all sorts. This leads to the COV's inability to move towards major consolidation sto support citizen services like a single e-mail system, standard directories, and other consolidation enterprise systems. This project will establish a secure network for the COV. VITA will implement switches and routers at the core to segment unsecured traffic from secured traffic for the wide area network. In addition, Intrusion Detection and remote devices will be installed to protect the local connections of in scope agencies.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000205  
Agency Abbreviation: VITA  
Project Formal Title: VITA Customer Relationship Management System

VITA customer relationship management system

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Project ID: P000206  
Agency Abbreviation: VITA  
Project Formal Title: IT Portfolio

To implement an IT investment portfolio management tool.

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Project ID: P000207  
Agency Abbreviation: VITA  
Project Formal Title: Web Accessibility Standards & Content Management

Provide agencies with a template based Web site that meets accessibility requirements and other standards and guidelines established by the state.

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Project ID: P000211  
Agency Abbreviation: VITA  
Project Formal Title: Email Consolidation

The goal of the Commonwealth Email (and File Server) Consolidation Project is to reduce IT costs and improve service to customers through the consolidation and elimination of redundant systems. Email and file server consolidation can provide the Commonwealth with a cost effective, secure, integrated solution that will reduce complexity and consolidate existing disparate systems into a single integrated platform, based on a common, standard, and modern technology infrastructure. A preliminary business case analysis identified the potential cost savings and benefits that can be expected from the project. Projected savings over a five-year period are estimated to be as high as \$64,000,000.

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Project ID: P000212  
Agency Abbreviation: VITA  
Project Formal Title: Oracle Financials

VITA will assume ongoing responsibility for the operation, support, and software upgrades to enterprise-wide business applications and databases. The economic imperative for the VITA applications' consolidation originates from the economies of scale that can be realized through aggregation of demand for software licenses, database licenses, computing power, and storage capacity. Likewise, significant personnel cost savings can be realized through consolidation while at the same time improving the timeliness of application upgrades and ongoing support of these enterprise systems.

To realize these savings, we must begin planning now for the eventual consolidation of enterprise-wide business applications. The first step is the development of a business case analysis of cost takeout opportunities for financial systems maintained by in scope agencies. If supported by the business case, detailed planning for the consolidation will be undertaken.

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Project ID: P000213  
Agency Abbreviation: VITA  
Project Formal Title: Server Consolidation

Server Consolidation - Place Holder - Sponsor for project unknown at this time.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000217  
Agency Abbreviation: VEC  
Project Formal Title: Mid-Atlantic Career Consortium (MACC) Workforce Application

Virginia has joined with other DOL Region 2 states (DE, MD, WV, PA and DC) to develop an internet based workforce application that will satisfy the requirements of the Workforce Investment Act of 1998 (WIA) and the Wagner Peyser Act for the delivery of employment services.

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Project ID: P000224  
Agency Abbreviation: NSU  
Project Formal Title: Data Center Relocation

All servers will be relocated to an existing building on campus. This location will have environmental and power systems installed in order to support the servers. Network equipment will be relocated to a small data center already in operation but which does not have sufficient space to house the servers. Customers served are students, faculty, staff, commonwealth citizens, alumni, and government. The expected benefits include but are not limited to the ability to continue University business uninterrupted, improved retention and graduation rates, and improved customer service.

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Project ID: P000231  
Agency Abbreviation: LC  
Project Formal Title: Replace Private Branch eXchange (PBX)

By the end of 2005, Longwood University must have completed a call for Proposals, vendor selection, installation and training is the use of a new PBX for the University telephone system.

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Project ID: P000257  
Agency Abbreviation: NSU  
Project Formal Title: Firewall Implementation

Various proposals for effective implementation were considered and the best plan was selected. All hardware has been purchased with some of it already installed. The University citizenry is the customer and the benefits are secured data communications and improved integrity of data.

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Project ID: P000328  
Agency Abbreviation: VITA  
Project Formal Title: Lightweight Directory Access Protocol (LDAP)

LDAP (Lightweight Directory Access Protocol):

Centralized user management (authentication and authorization) in large Enterprises can be a daunting task even if managed from the start. When planning the merger of 91 separate entities, each with at least one and usually several user directories, the task becomes impossible to manage without either large numbers of user administrators or leveraging technology to centralize the process and standardize the interface among disparate systems. The best practice technical solution to this problem is the use of a centralized user directory structure and administration tools which we are commonly referring to as "The LDAP project" but is in reality shorthand for some sort of X.500 directory system that will probably use LDAP.

The LDAP project's goal is to develop a framework to centrally manage the VITA user community across disparate inherited systems and to guide the development of future systems to leverage this framework.

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Project ID: P000413  
Agency Abbreviation: DEDR  
Project Formal Title: Videoconferencing

Videoconferencing will broaden EDR's dispute resolution services by providing state employees with the option of low-cost and time-efficient distance learning.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000421  
Agency Abbreviation: NSU  
Project Formal Title: Mediated Classrooms

We will be installing systems in classrooms to augment traditional teaching methods. This can range from an instructor PC hooked to a video projector, all the way to handheld computers for increased classroom participation and field work. Students will be the beneficiaries of the improved services. The benefit will be higher student retention rates, higher student graduation rates, and a much better educated graduate for current and future job market.

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Project ID: P000423  
Agency Abbreviation: DCJS  
Project Formal Title: Replace Phone Systems at Division of Forensic Science

The general approach to the project is to provide enhanced telecommunication services to the Forensic Lab system. This would include direct inward dialing capabilities, voice mail, and additional extensions in the northern Virginia, Roanoke and Norfolk labs. In the central lab in Richmond we would be replacing the ISDN/analog system with one that allows for direct inward dialing and voice mail throughout the lab. Specific vendors, equipment, and procurements have not yet been identified.

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Project ID: P000435  
Agency Abbreviation: DCJS  
Project Formal Title: Replacement of Building Access System for Division of Forensic Science

The entire project approach has not yet been developed. However, it will probably include an RFP to solicit solutions from various vendors. Once a solution and vendor are chosen we would anticipate completion of the project in stages over a one year time period. Division of Forensic Science staff would serve as the project manager. Division staff will also be responsible for system management and management of the maintenance contract for the system. Customers who will benefit from the project include division staff and law enforcement whose evidence is under control of the division while it is being analyzed.

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Project ID: P000438  
Agency Abbreviation: LC  
Project Formal Title: Replace end-of-life network equipment

By the end of 2005, Longwood University must have completed a call for Proposals, vendor selection, installation and training is the use of new network routers and switches for the University LAN

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Project ID: P000458  
Agency Abbreviation: GMU  
Project Formal Title: Telecommunications/Infrastructure Project

This project seeks to fund critical telecommunications infrastructure upgrades that are required to meet current growth projections at the University's three main campuses, and to replace obsolete equipment that does not support newer, more efficient technologies such as Voice over IP and IP Multicasting. These technologies are key components of plans to accommodate additional students and researchers by meeting their voice and data needs at the lowest cost, while building in added security. The primary Internet router and much of the Fairfax campus network equipment must be replaced in late 2003 - early 2004 in order to support current enrollment. The "outside telecom plant" for the Prince William IIIa building, along with the intercampus optical fiber and some network upgrades, must be completed in 2004 so the building can be opened on schedule for Fall 2004. The firewalls and associated equipment would be installed in 2004 as well. Total outlay in fiscal year 2004 would be approximately \$2.8M. The PBX switchroom expansion (\$500k) must be completed sometime in 2006 in order to make room for an additional PBX that will be needed in the following biennium to support planned on-campus housing growth. University network support staff would be overseeing the project and performing much of the implementation, with consultants brought in as required for installation and configuration of some specialized network devices, and design and construction of switchroom expansion.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000459  
Agency Abbreviation: VDEM  
Project Formal Title: IT Infrastructure for the Joint Virginia Department of Emergency Management

The approach will be to enlist the aid of VITA and other experts in the design, procurement, installation, acceptance, and implementation of a state-of-the-art IT and telecommunications infrastructure to support the new Virginia Emergency Operations Center (including the Fusion Center). The new VEOC will be the Commonwealth's command and control and information analysis and assurance center, designed and equipped to support preparedness, response, recovery, and mitigation operations for an all-hazards environment. The VEOC will be "connected" in a real-time environment to the Office of the Governor, other state agencies, local governments, partners in critical business and industries, various federal civilian and military agencies, and other states' emergency operations centers. There is a requirement for robust, redundant, and reliable IT and telecommunications systems to fully support operations in a worst-case environment, regardless of cause. The expected benefits are an increased coordination and information-intelligence sharing between all levels of government, using a reliable mechanism to accept, analyze, interpret, and appropriately share with others as required; a fully-capable operations center for response and recovery actions for the Commonwealth in support of localities; the reliable ability to support continuity of government operations and protection of critical staff (COOP and COG); a secure environment for the Governor and designated staff to coordinate operations with his counterparts and the federal government.

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Project ID: P000461  
Agency Abbreviation: VSP  
Project Formal Title: Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Palm Print Search

Existing VSP AFIS personnel would document the requirements for a palm print system. Other states would be contacted as to their experiences. Local fingerprint personnel would also assist in development of requirements. Cost proposals would be reviewed and the system would be procured. Additional hardware and software would need to be added to AFIS at VSP to allow these searches.

A conversion plan would be developed with local agency personnel to take their existing palm prints and convert to the state's AFIS system for searching. Conversion could be done by local agency personnel or contracted with the vendor. Setting up these prints on Virginia's AFIS system would allow statewide access to these prints. Transmission specifications would be developed and implemented where feasible for agencies with live scan palm print capabilities. Upgrades to the AFIS system at State Police benefits the entire criminal justice community and especially law enforcement. Below is the project approach: VSP researches and develops requirements for palm print equipment and software. Contacts agencies in other states regarding requirements and operations. Estimated duration: 3 months.

VSP works with selected vendor to finalize requirements, system design, develop project schedule, and obtain contract.

Estimated duration : 3 months Estimated \$25,000 in contractor expenses.

Vendor converts local palm print cards. Cost: \$300,000. Duration 6 months.

VSP and vendor conduct acceptance testing on system. Estimated duration: 3 months. Estimated \$25,000 in contractor costs.

Vendor with VSP support install central and remote systems. 3 months. Estimated vendor costs: \$1,000,000. Estimated contractor costs: \$50,000.

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Project ID: P000462  
Agency Abbreviation: VSP  
Project Formal Title: Enhancement of the Automated Fingerprint Identification System21 (AFIS21) - Wireless Access

The AFIS21 system stores and searches fingerprints for criminal justice and employment checks. Currently there are over 1.4 million sets of fingerprints stored on AFIS and accessible from 24 remote AFIS terminals in local and state agencies and more than 100 live scan systems installed throughout the state. A high speed communication line is used by all these terminals because of the size of the transmissions (almost 1 mb compressed).

Several vendors now offer single finger scanners based on PDA technology or on specialized units developed exclusively for this application. These units capture two fingers and transmit to a server that would be installed at State Police to handle these transactions. In addition to this server, a single finger database would need to be established as an upgrade to AFIS so that a quick response could be generated to the field officer. The existing 1.4 million database would be electronically converted for use as a single finger database. Additional fingerprint matchers and conversion services for the database would be procured from Virginia's AFIS vendor.

In addition, a criminal summons could be developed using the capabilities of the wireless units to allow CCH to be updated with arrest information.

A new transaction would be developed for this on Virginia's Computerized Criminal History (CCH) and AFIS systems.

## Appendix D - Major Information Technology Project Descriptions

contractor costs: \$100,000.

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Project ID: P000463  
Agency Abbreviation: VSP  
Project Formal Title: Criminal Justice Information System (CJIS) Master Name Index

The solution is based on a centralized criminal justice name index to be used by all criminal justice agencies. The name index would store data fields that need to be quickly compared and retrieved. The name index would largely be based on the CCH name index, which contains all fingerprinted offenders, and this name index would be expanded to handle non-fingerprinted offenders. The name index would link to more detailed information residing on other systems real-time.

Below are some of the key tasks and deliverables:

- There is an expectation that this initial effort would query systems from VSP, courts, DOC, SCB's LIDS (for jail information) and perhaps DCJS's community corrections system and DJJ to capture adult offenders who are less than 18 years old. This decision needs to be finalized in cooperation with the effected agencies.
- Messaging interfaces between the effected systems needs to be agreed upon. A key consideration is to provide users with very good response time.
- Certain CSP data standards need to be implemented on some of the systems listed above.
- While this project would benefit nearly all criminal justice business processes, some business processes should be changed to better leverage the potential benefits. Business processes that need to be examined from this perspective need to be identified and analyzed.
- A formal requirements analysis is required.
- A cooperative agreement between the effected agencies needs to be finalized. Some of the funding from this project would be allocated to other agencies to perform work necessary to interface with the new name index.
- Each effected agency develops, programs, tests and implements system components as specified in the cooperative agreement.
- Significant user education and training will be necessary to better leverage potential benefits.

It is anticipated that this project would require 24 months. The development cost is \$2 million and the annual operational/maintenance cost is \$100,000. The "Project Business Objectives" above correlate to the expected benefits.

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Project ID: P000464  
Agency Abbreviation: NSU  
Project Formal Title: Community Hospital Building Renovation

The project approach is to provide campus network connectivity and internet access to all personnel that will be located in the renovated space. Fiber connectivity will be installed to the building and standard network cabling and ports will be installed to each work unit within the building. In addition, the network equipment required to support the network architecture and interface with other network devices are included in this project estimate.

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## Appendix D - Major Information Technology Project Descriptions

Project ID: P000465  
Agency Abbreviation: NSU  
Project Formal Title: RISE Network Connectivity

The project approach is to provide internet connectivity to the RISE Center and subsequently to the NSU campus network as a leverage and redundancy path.

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Project ID: P000466  
Agency Abbreviation: NSU  
Project Formal Title: Residence Hall Connectivity

The project approach is to provide campus network connectivity and internet access to all students from both academic arena and residential areas. Fiber connectivity will be installed to the building and standard network cabling will be installed on a port per pillow basis.

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Project ID: P000467  
Agency Abbreviation: VITA  
Project Formal Title: Procure Emergency Generator

With the creation of the VITA, a growing number of state agencies will depend on the VITA Data Center as they are brought into the VITA infrastructure. In turn VITA relies more heavily than ever before on uninterrupted power in order to appropriately service its customers as they fulfill their missions to the citizens of the Commonwealth. Many outside sources pose a threat to the Data Center's electric power, including the effects of a terrorist attack. The VITA Data Center in Richmond has no power generator backup capability for its battery system. Therefore, during a power loss of greater than one hour, there will be an interruption in computer services that will exacerbate planning and recovery during a terrorist incident. This very short timeframe of service after loss of power is due to two factors. The limited capability of its uninterrupted power supply system, and the subsequent lack of air conditioning would require the computers to be powered down to avoid damage.

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Project ID: P000468  
Agency Abbreviation: VSP  
Project Formal Title: Statewide Agencies Radio System

Upgrade existing Virginia State Police Land Mobile Radio and microwave networks to create a shared network for all agencies.

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Project ID: P000469  
Agency Abbreviation: VSP  
Project Formal Title: Mobile Computer Terminal Upgrade Project

Procure, install, and maintain 487 new mobile computer terminals with wireless Cellular Digital Packet Data Service, for the purpose of accessing Virginia Criminal Identification Network and DMV records in the field by law enforcement officers.

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Project ID: P000470  
Agency Abbreviation: VSP  
Project Formal Title: State and Local Preparedness Program

This project replaces the VSP mainframe system with an enterprise server system, establishes a similar enterprise server at a "hot site" backup data center, and updates the disaster recovery plan.

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Project ID: P000472  
Agency Abbreviation: VDOT  
Project Formal Title: Coleman Bridge Automated Toll Facility

This project will develop, document, and implement software for a new Automated Toll Collection System.



## Appendix D - Major Information Technology Project Descriptions

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Project ID: P000473  
Agency Abbreviation: SBE  
Project Formal Title: Campaign Finance Management System

Consolidated system to manage e-filed campaign finance reports: new software for e-filers that integrates seamlessly with SBE mgmt software, posts reports to the SBE web site, meets all legal reqs, allows localities to accept e-filings. (see SBE Strategic Plan submission) The Code requires that SBE accept e-filings. As of 1/1/04, Political Committees are required to e-file once they meet a threshold. The current system is increasingly problematic. SBE has applied patches to add functions required by the Code but report review is manual. Many states accept e-filings and provide software to clients. There are COTS options; each requires customization for VA. One COTS package offers a 1-user license at \$27,000 and annual maint. of \$5000. A 30-user license is \$135,000 with \$24,300 annual maint. Fees do not include customization. We will provide firm estimates during Project Initiation. SBE requires an additional appropriation for this project.

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Project ID: P000474  
Agency Abbreviation: VITA  
Project Formal Title: VIPNet Enterprise Solutions

VIPNet's Enterprise Solutions are a set of Web applications and services that can be leveraged across all Executive Branch entities. These are services that are common among the Executive Branch entities, but are currently not available online. These solutions are ready for immediate implementation, allowing agencies to develop and deploy more online services faster by using the VIPNet Enterprise Solutions. The VIPNet Enterprise Solutions include:

- Google Search
- Online Shopping Cart
- Online Payment Portal
- Online Licensing and Permitting
- Events Registration
- Activities Calendar
- Constituency Notification

These VIPNet Enterprise Solutions will improve the quality of Virginia's Web-based services and help government entities, as well as citizen and business users, to realize substantial gains in efficiency and significant cost avoidance. With that productivity gain, agencies effectively have more man-hours to devote to additional projects.

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